

**Ministry of Environment, Forest and Climate Change
Impact Assessment Division
(Industry-I Sector)**

SUMMARY RECORD OF THE NINTH (9th) MEETING OF RE-CONSTITUTED EXPERT APPRAISAL COMMITTEE HELD DURING 30-31st JULY, 2019 FOR ENVIRONMENTAL APPRAISAL OF INDUSTRY-I SECTOR PROJECTS CONSTITUTED UNDER THE PROVISIONS OF ENVIRONMENTAL IMPACT ASSESSMENT (EIA) NOTIFICATION, 2006.

The ninth meeting of the Re-Constituted Expert Appraisal Committee (EAC) for Industry-1 Sector as per the provisions of the EIA Notification, 2006 for Environmental Appraisal of Industry-1 Sector Projects was held during 30-31st July, 2019 in the Ministry of Environment, Forest and Climate Change. The list of participants is annexed.

After welcoming the Committee Members, discussion on each of the agenda items was taken up ad-seriatim. The minutes of 8th meeting held during 26th June 2019 was confirmed by the EAC and already uploaded on Parivesh portal.

30th July, 2019

- 9.1 Proposed Expansion of Writing & Printing Paper Plant (200 to 400 TPD) and Co-generation Power Plant (12 MW to 30 MW) by M/s K R Pulp and Papers Limited (Unit-II) located At Village Rampura, Tehsil Sadar (Shahjahanpur), District Shahjahanpur Uttar Pradesh-[Online Proposal No. IA/UP/IND/2366/2008, File No. J-11011/1132/2007-IAII(I)]- Environment Clearance Regarding.**
- 9.1.1 The Project Proponent and the accredited Consultant M/s. J.M. EnviroNetPvt. Ltd. (Serial.No. 88) made a detailed presentation on the salient features of the project and informed that:
- 9.1.2 The proposal of M/s K R Pulp & Papers Limited (Unit II) located in Village Rampura, Tehsil Sadar (Shahjahanpur), District Shahjahanpur, State Uttar Pradesh was initially received in the Ministry on 1st September, 2018 for obtaining Terms of Reference (ToR) as per EIA Notification, 2006. The project was appraised by the Expert Appraisal Committee (Industry) [EAC(I)] during its 35th meeting held on 18th September, 2018 and prescribed ToRs to the project for undertaking detailed EIA study for obtaining environmental clearance. Accordingly, the Ministry of Environment, Forest and Climate Change had prescribed ToRs to the project on 9th October, 2018 vide Lr. No. IA J-11011/1132/2007-IA.II (I).
- 9.1.3 Based on the ToRs prescribed to the project, the project proponent submitted an application for environmental clearance to the Ministry online on 10th July, 2019 vide Online Application proposal No. IA/UP/IND/2366/2008.
- 9.1.4 The project of M/s. K R Pulp & Papers Limited (Unit II) located in Village Rampura, Tehsil Sadar (Shahjahanpur), District Shahjahanpur, State Uttar Pradesh is for Expansion of Writing & Printing Paper Plant (200 to 400 TPD) and Co-generation Power Plant (12

MW to 30 MW). The existing project was accorded environmental clearance vide letter no. J-11011/1132/2007-IA-II (I) dated 12th February, 2009.

- 9.1.5 The status of compliance of earlier EC was obtained from Regional Office, Lucknow vide letter no. IV/ENV/UP/Ind-120/305/2009/668 dated 5th March, 2019. There is no non compliances reported by Regional Officer. The existing and the proposed capacity for different units of the plant are as below:

Units	Existing capacity	Proposed additional capacity	Total capacity after expansion
Writing and printing paper	200 TPD	200 TPD	400 TPD
Co-generation power plant	12 MW (Co-gen Power Plant)	18 MW*	30 MW
Chemical recovery plant	Non-Conventional Recovery** (300 TPD)	700 TPD (New Conventional Recovery Plant with Lime Kiln)	700 TPD (New Conventional Recovery Plant with Lime Kiln)

Note: *11 MW generated by steam from Conventional recovery plant & 7 MW from proposed 60 TPH boiler.

**After expansion, existing non -conventional chemical recovery plant will be kept on standby.

- 9.1.6 The total land required for the project is 24 hectares which is already an industrial land. No forestland involved. Expansion will be done within existing plant premises only so no additional land is required. The natural drain Bhaksi Nala passes through the plant area. It has been reported that this natural drain i.e., Bhaksi Nala exist around the project and modification/diversion in the existing natural drainage pattern at any stage has not been proposed.
- 9.1.7 The topography of the area is flat and reported to lie between 27° 50' 19.37'' to 27° 50' 41.61''N Latitude and 79° 50' 55.93'' to 79° 51' 25.64''E Longitude in Survey of India toposheet No. 54 M/13 and 54 M/9 at an elevation of 148-149m AMSL. The ground water level reported to be ranging between 4.8 To 6.6 m below the land surface during the post-monsoon season and 5.5 To 7.8 m below the land surface during the pre-monsoon season Further, the overall stage of groundwater development is reported to be less than 70% for study area (Block /Tehsil-Sadar) as per Central Ground Water Board and thereby these areas are categorized under 'SAFE' zone.
- 9.1.8 No national park/Wildlife sanctuary/biosphere reserve/tiger reserve/elephant reserve etc. are reported to be located in the core and buffer zone of the project. The area also does not report for corridor of Schedule-I fauna.
- 9.1.9 The process of project showing the basic raw material used and the various processes involved to produce the final output, waste generated in process.

S. No.	Process stage after expansion	Waste generated	Treatment facility
1.	Raw material handling & processing (Bagasse/mixed hard wood and wheat straw)	Waste water from washing	Effluent Treatment Plant
		Discarded pith and straw waste	Used as fuel in boiler
2.	Cooking in Digester with caustic	-	-
3.	Blow tank	-	-
4.	Brown stock washing and cleaning	Black liquor	Recycled through conventional chemical recovery process
5.	Oxygen delignification	-	-
6.	Bleaching	Waste water	Effluent Treatment Plant
7.	Stock preparation and addition of supplementary pulp	-	-
8.	Paper machine	Waste water	Effluent Treatment Plant
9.	Effluent Treatment Plant	ETP sludge	Used as fuel in boiler
10.	Co-generation power plant	Particulate matter and gaseous emissions	ESP as APCE and adequate stack height
11.	Chemical recovery plant	Gaseous emissions	ESP as APCE and adequate stack height
12.	Lime kiln	Gaseous emissions	ESP as APCE and adequate stack height

9.1.10 The targeted production capacity of writing and printing paper plant is 400 TPD. The raw material (bagasse, wheat straw, mixed hard wood) would be procured from nearby sugar mills/farmers/ply wood industry. The raw material transportation will be done through Road.

Raw material requirement

S. No.	Particulars	Existing requirement (TPD)	Additional Requirement (TPD)	Total Requirement (TPD)	Source and mode of transport	Approx. distance from plant site	Storage Area and Storage capacity
(A)	<i>Raw material consumption</i>						
1	Bagasse, wheat straw, mixed hard	784	778	1562	Nearby Sugar Mill/ Farmers/ Ply Wood	130 Km Radius	Yard with capacity 80000

S. No.	Particulars	Existing requirement (TPD)	Additional Requirement (TPD)	Total Requirement (TPD)	Source and mode of transport	Approx. distance from plant site	Storage Area and Storage capacity
	wood				Industry by road		Ton
(B) Chemical consumption							
1	Caustic	62	99	161	95% from CRP through pipeline and 5% from Market By road	400 Km	700 Ton
2	Sodium Chlorate	2.59	4.0	6.59	Nearby markets by road	800-1000 Km	200 Ton
3	Hydrogen peroxide	2.06	2.43	4.49	Nearby markets by road	800-1000 Km	50 Ton
4	AKD	2.4	2.4	4.8	Nearby markets by road	200-300 Km	80 Ton
5	Starch	0.8	1.6	2.4	Nearby markets by road	500-800 Km	50 Ton
6	Oxygen	0	6	6	In-house by pipeline	--	--
7	PCC/GCC	20	55	75	In house/market	0-500 km	500 ton

Fuel requirement

S. No.	Fuel	Existing Requirement	Additional Requirement	Total quantity	Approx. distance	Source	Storage facility with capacity
(A) Fuel for Boiler							
1.	Rice Husk and Coal with Pith & Sludge in combination	Rice husk - 430 T/day or Coal - 360 T/Day and Pith & sludge in combination	Coal - 300 T/Day	Rice husk - 430 T/Day & 300 T/Day coal Or Coal - 660 T/Day with Pith & sludge in combination	100-1000 Km	Open market by road	12000 Ton

S. No.	Fuel	Existing Requirement	Additional Requirement	Total quantity	Approx. distance	Source	Storage facility with capacity
(B) Fuel for lime kiln							
1.	Pet coke	Nil	Pet coke 45 T/Day	Pet coke 45 T/Day	300 Km	Nearby Refineries Or Open market by road	2500 Ton
2.	Furnace Oil	Nil	Furnace Oil 22 T/Day	Furnace Oil 22 T/Day	300 Km	Nearby Refineries Or Open market by road	100 Ton

- 9.1.11 Total fresh water requirement after expansion will be 16560 KLD which will be met from the ground water. The permission for drawl of groundwater is obtained from Central Ground Water Authority vide Lr. No. CGWA/NOC/IND/REN/2/2019/5562 dated 18th June 2019.
- 9.1.12 The total power requirement of the project after expansion is estimated as 21 MW which will be sourced from existing 12 MW and proposed 18 MW co-generation power plant and Chemical recovery boiler.
- 9.1.13 Baseline Environmental Studies were conducted during Post Monsoon Season i.e. from 1st October, 2018 to 31st December, 2018. Ambient air quality monitoring has been carried out at 8 locations during October to December, 2018 and the data submitted indicated PM₁₀ (62.4 to 94.6 µg/m³), PM_{2.5} (38.9 to 54.5 µg/m³), SO₂ (6.3 to 20.6µg/m³) and NO_x (15.8 to 41.4 µg/m³). The results of the modelling study indicates that the maximum increase of GLC for the expansion project is 1.45µg/m³ with respect to the PM₁₀, 0.46 µg/m³ with respect to the PM_{2.5}, 2.09 µg/m³ with respect to SO₂, 3.35 µg/m³ with respect to the NO_x.
- 9.1.14 Ground water quality has been monitored in 9 locations in the study area and analysed. pH: 7.19 to 7.92, Total Hardness: 133.65 to 361.35 mg/l, Chlorides: 10.85 to 61.64 mg/l, Fluoride: 0.26 to 0.85 mg/l. Heavy metals are within the limits. Surface water samples were analysed from 3 locations. pH: 7.73 to 7.89; DO: 3.6 to 6.4 mg/l and BOD: 2.3 to 26.4 mg/l; COD from 7.90 to 126.9 mg/l.
- 9.1.15 Noise levels are in the range of 52.8 to 73.9 Leq dB(A) for daytime and 42.8 to 67.4 Leq dB(A) for night time.
- 9.1.16 R& R is not applicable. Proposed expansion will be done within existing plant premises and no additional land is acquired for the same.
- 9.1.17 It has been reported that a total of 16 TPD ETP sludge, 198 TPD fly ash, 232 TPD lime sludge, 529.4 TPD black liquor solids and 15 LPD used oil will be generated due to the project. ETP sludge is being/will be burnt in the boiler, Fly ash is being/will be used for in house brick manufacturing unit, given to farmers as manure, given to brick

manufacturers. Lime sludge will be burnt in lime kiln to obtain calcium oxide, black liquor solids will be incinerated in conventional chemical recovery plant after expansion to recover caustic (White liquor), lime grit will be given to brick manufacturers and low land filling, used oil is being/will be sent to CPCB authorized recyclers. It has been envisaged that an area of 7.9 ha is already developed as green belt around the plant site to attenuate the noise levels and trap the dust generated due to the project development activities.

- 9.1.18 It has been reported that the Consent to Operate (Water and Air) from the Uttar Pradesh Pollution Control Board has been obtained vide Lr. No. 38657/UPPCB/Bareilly(UPPCBRO) /CTO/water/SHAHJAHANPUR /2018 dated 11.4.2019 and 38652/UPPCB/Bareilly(UPPCBRO) /CTO/air/SHAHJAHANPUR/2018 dated 11.4.2019 and consent is valid from 03/04/2019 to 31/12/2020
- 9.1.19 The Public hearing of the project was held on 15/05/2019 at plant site under the chairmanship of Mr. Amar Pal Singh (Additional District Magistrate, Shahjahanpur) for Expansion of Writing & Printing Paper Plant (200 to 400 TPD) and Co-generation Power Plant (12 MW to 30 MW). The issues raised during public hearing are for CSR activities, air and water pollution, mitigation measures and monitoring. An amount of 370 Lakhs (maximum percentage of total capital cost i.e. 460.25 Crores as per Office Memorandum on CER dated 1st May, 2018) has been earmarked for Enterprise Social Commitment based on public hearing issues.
- 9.1.20 The capital cost of the project is Rs. 460.25 Crores and the capital cost for environmental protection measures is proposed as Rs. 21.03 Crores. The annual recurring cost towards the environmental protection measures is proposed as Rs. 4.35 Crores / annum. The detailed CSR plan has been provided in the EMP in its page No. 190 to 191. Total direct employment after the proposed expansion is 541 persons during operation phase.
- 9.1.21 Greenbelt has been developed in 7.9 Ha which is about 33% of the total acquired area. A 5-10 m wide greenbelt, consisting of at least 3 tiers around plant boundary has been/will be developed as greenbelt and green cover as per CPCB/MoEF&CC, New Delhi guidelines. Local and native species has been planted with a density of 1500 trees per hectare. Additional no. of 1800 saplings will be planted and nurtured to make greenbelt more dense.
- 9.1.22 The proponent has mentioned that there is no court case or violation under EIA Notification to the project or related activity.

Observations of the Committee:

- 9.1.23 The compliance of the EC was monitored by Regional Office when the plant was not in operation.
- 9.1.24 The Project is located in the Ganga basin and Notification 7th October 2016 is applicable, whereby no discharge of treated /untreated effluent directly or indirectly is permitted in /tributaries of Ganga.

Recommendations of the Committee:

- 9.1.25 After detailed deliberations, the committee sought additional information on the following issues.
- i. Explore the possibility for recycling the effluents and prepare action plan for using the same in the plant in accordance with the requirement of Notification, S.O. 3086 7th October, 2016.
 - ii. No additional groundwater abstraction is allowed. It is required to explore the possibility for using surface water and from rainwater harvesting and storage and other sources.
 - iii. The estimated emissions from recovery boiler and power plant shall be revisited.
 - iv. Usage of pet coke is not permitted.
 - v. Certified Compliance report of existing EC from Regional Office, MoEF&CC shall be furnished.
- 9.2 Expansion of Kraft Paper Plant from 100 TPD to 200 TPD; Agro/Mixed Hard Wood/Waste Paper Pulp/Ready Pulp from 100 TPD to 200 TPD; Co-generation Power Plant 2.5 MW by M/s K R Pulp and Papers Limited (Unit-I) located At Village Rampura, Tehsil Sadar (Shahjahanpur), District Shahjahanpur Uttar Pradesh-[Online Proposal No. IA/UP/IND/107930/2018, File No. J-11011/289/2018-IAII(I)]– Environment Clearance Regarding.**
- 9.2.1 The Project Proponent and the accredited Consultant M/s. J.M. Enviro Net Pvt. Ltd. (Serial No. 88) made a detailed presentation on the salient features of the project and informed that:
- 9.2.2 The proposal of M/s K R Pulp & Papers Limited (Unit I) for expansion of Kraft Paper Plant from 100 TPD to 200 TPD; Agro/Mixed Hard Wood/Waste Paper Pulp/Ready Pulp from 100 TPD to 200 TPD; Co-generation Power Plant 2.5 MW located in Village Rampura, Tehsil Sadar, District Shahjahanpur, State Uttar Pradesh was initially received in the Ministry on 29th August, 2018 for obtaining Terms of Reference (ToR) as per EIA Notification, 2006. The project was appraised by the Expert Appraisal Committee (Industry) [EAC(I)] during its 36th meeting held on 9th October, 2018 and prescribed ToRs to the project for undertaking detailed EIA study for obtaining environmental clearance. Accordingly, the Ministry of Environment, Forest and Climate Change had prescribed ToRs to the project on 10th December, 2018 vide Lr. No. IA-J-11011/289/2018-IA.II (I).
- 9.2.3 Based on the ToRs prescribed to the project, the project proponent submitted an application for environmental clearance to the Ministry online on 10th July, 2019 vide Online Application proposal no. IA/UP/IND/2366/2008.
- 9.2.4 The project of M/s K R Pulp & Papers Limited (Unit I) located in Village Rampura, Tehsil Sadar, District Shahjahanpur, Uttar Pradesh is for enhancement of production of Kraft Paper Plant from 100 TPD to 200 TPD. The existing project is operating on the basis of CTO air and water and NOC vide letter no. G06631/C-5/2/NOC-3/97 dated 10.1.97 issued by UPPCB.

- 9.2.5 Certified CTO compliance from RO, Bareilly has been obtained and the visit was conducted on 2.1.2019 and 21.1.2019. There is no non-compliances reported by Regional Officer. The existing and proposed capacity for different products for site area as below:

Units	Existing capacity	Proposed additional capacity	Total capacity after expansion
Kraft Paper	100 TPD	100 TPD	200 TPD
Co-generation power plant*	2.5 MW	Nil	2.5 MW

*Currently, 2.5 MW co-generation power plant exists. After expansion, power and steam will be sourced from 18 MW power plant in Unit II. 2.5 MW Co-generation power plant will be operational as and when required.

- 9.2.6 The total land required for the project is 11 ha (27.18 acres) which is already an industrial land. No forestland is involved. The proposed expansion will be done within the existing plant premises so no additional land is required for the expansion. No river passes through the project area. It has been reported that no water body exist around the project and modification/diversion in the existing natural drainage pattern at any stage has not been proposed.
- 9.2.7 The topography of the area is flat and reported to lie between 27°50'36.05"N to 27°50'49.49" Latitude and 79°50'57.97"E to 79°51'17.24"E Longitude in Survey of India toposheet No. 54 M/13 and 54 M/9 at an elevation of 149 m amsl. The ground water level reported to be ranging between 4.8 To 6.6 m below the land surface during the post-monsoon season and 5.5 To 7.8 m below the land surface during the pre-monsoon season. Further, the overall stage of groundwater development is reported to be less than 70% for study area (Block /Tehsil-Sadar) as per Central Ground Water Board and thereby these areas are categorized under 'SAFE' zone.
- 9.2.8 No national park/wildlife sanctuary/biosphere reserve/tiger reserve/elephant reserve etc. are reported to be located in the core and buffer zone of the project. The area also does not report for corridor for Schedule-I fauna.
- 9.2.9 The process of project showing the basic raw material used and the various processes involved to produce the final output, waste generated in process.

S. No.	Process stage after expansion	Pollutants	Treatment facility
1	Raw material handling & processing (Bagasse/mixed hard wood and wheat straw)	Waste water from washing	Effluent Treatment Plant
		Discarded pith and straw waste	Fired in boiler as fuel
2	Cooking in Digester with caustic	-	
3	Blow tank	-	

S. No.	Process stage after expansion	Pollutants	Treatment facility
4	Brown stock washing and cleaning	Black liquor	Recycled through conventional chemical recovery process in Unit II.
5	Stock preparation and addition of supplementary pulp	-	-
6	Paper machine	Waste water	Effluent Treatment Plant
7	Effluent Treatment Plant	ETP sludge	Used as fuel in boiler
8	Co-generation power plant	Particulate matter and gaseous emissions	Bag filter and adequate stack height

9.2.10 The targeted production capacity of Kraft Paper plant is 200 TPD. The basic raw material for the plant i.e. Bagasse/mixed hard wood and waste paper/Ready pulp which will be procured from nearby Sugar Mill/Farmers and plywood industries. The transportation will be done through Road.

Raw material requirement

S. No.	Particulars	Existing requirement (TPD)	Additional Requirement (TPD)	Total Requirement (TPD)	Source and mode of transport	Approx. distance from plant site	Storage Area and Storage capacity
(A) Raw material consumption							
1	Bagasse/mixed hard wood and waste paper/Ready pulp	234 (Agro and waste paper)	259.4	493.4 (Agro/mixed wood/ waste paper/ ready pulp)	Nearby Sugar Mill/Farmers and plywood industries through truck/trolleys by road	150-200 Km	30,000 Ton open yard
(B) Chemical consumption							
1	Caustic	13.4	62.9	76.3	95% from CRP through pipeline and 5% from Local chemical suppliers through tanker by road	500 Km	100 Ton tanks
2	Rosin	1.0	1.0	2.0	Local chemical suppliers through tanker by road	500 Km	30 Ton tanks
3	Alum/AKD	9.0	6.0	15.0		500 Km	50 Ton tanks

- 9.2.11 Total water requirement after expansion will be 4135 m³/day. The permission for drawl of groundwater is obtained from Central Ground Water Authority vide Lr. No. CGWA/NOC/IND/ORIG/2019/5380 dated 28th May, 2019.
- 9.2.12 After expansion, the total power requirement of the project is estimated as 4.0 MW which will be sourced from captive power plant of 18 MW to be installed in Unit II and in emergency it is being/will be sourced from existing 2.5 MW co-generation power plant and DG Sets.
- 9.2.13 Baseline Environmental Studies were conducted during Post Monsoon Season i.e. from 1st October, 2018 to 31st December, 2018. Ambient air quality monitoring has been carried out at 8 locations during October to December and the data submitted indicated: PM₁₀ (62.4 µg/m³ to 94.6 µg/m³), PM_{2.5} (38.9 µg/m³ to 54.5 µg/m³), SO₂ (6.3 to 20.6 µg/m³) and NO_x (15.8 to 41.4 µg/m³). The results of the modelling study indicates that the maximum increase of GLC for the proposed project is 0.73 µg/m³ with respect to the PM₁₀, 0.40µg/m³ with respect to the SO₂ and 0.68µg/m³ with respect to the NO_x.
- 9.2.14 Ground water quality has been monitored in 9 locations in the study area and analysed. pH: 7.19 to 7.92, Total Hardness: 133.65 to 361.35 mg/l, Chlorides: 10.85 to 61.64 mg/l, Fluoride: 0.26 to 0.85 mg/l. Heavy metals are within the limits. Surface water samples were analysed from 3 locations. pH: 7.73 to 7.89; DO: 3.6 to 6.4 mg/l and BOD: 2.3 to 26.4 mg/l. and COD from 7.90 to 126.9 mg/l.
- 9.2.15 Noise levels are in the range of 52.8 to 73.9 Leq dBA for day time and 42.8 to 67.4 Leq dBA for night time.
- 9.2.16 R& R is not applicable. Proposed expansion will be done within existing plant premises and no additional land has been acquired.
- 9.2.17 It has been reported that a total of 3.4 TPD of ETP Sludge, 12 TPD of fly ash, 170 TPD of black liquor solids and 250 litre/month of used oil will be generated due to the project. ETP sludge is being/will be burnt in the boiler as fuel, fly ash is/will be used as manure/for in- house brick manufacturing/given for brick manufacturing, black liquor solids will be incinerated in conventional chemical recovery plant in Unit II after expansion to obtain caustic (white liquor), used oil is/will be sent to CPCB authorised recyclers. It has been envisaged that an area of 3.6 ha has already been developed as green belt around the plant site to attenuate the noise levels and trap the dust generated due to the project development activities.
- 9.2.18 It has been reported that the Consent to Operate (Water and Air) from the Uttar Pradesh Pollution Control Board has been obtained vide Lr. No. 39604/UPPCB/Bareilly (UPPCBRO)/CTO/water/SHAHJAHANPUR/2018 dated 11.4.2019 and 39595/UPPCB/Bareilly (UPPCBRO)/CTO/air/SHAHJAHANPUR/2018 dated 11.4.2019. and consent is valid from 11.2.2019 to 31.12.2020.
- 9.2.19 The Public hearing of the project was held on 15/05/2019 at plant site under the chairmanship of Mr. Amar Pal Singh (Additional District Magistrate, Shahjahanpur) for the expansion of Kraft Paper Plant from 100 TPD to 200 TPD; Co-generation Power Plant 2.5 MW. The issues raised during public hearing are air and water pollution, dust and ash dispersion, employment. An amount of 29 Lakhs (1% of total capital cost as per

O.M. on CER dated 1st May, 2018) has been earmarked for Enterprise Social Commitment based on public hearing issues.

- 9.2.20 The capital cost of the project is Rs 29.88 Crores and the capital cost for environmental protection measures is proposed as Rs. 5.81 Crores. The annual recurring cost towards the environmental protection measures is proposed as Rs 1.4 Crores/annum. The detailed CSR plan has been provided in the EMP in its page No. 195. Total direct employment after expansion will be 149 persons during operation phase.
- 9.2.21 Greenbelt has been developed in 3.6 Ha which is about 33% of the total acquired area. A 5-10 m wide greenbelt, consisting of at least 3 tiers around plant boundary has been/will be developed as greenbelt and green cover as per CPCB/MoEF&CC, New Delhi guidelines. Local and native species has been planted with a density of 1500 trees per hectare. Additional no. of 1000 saplings will be planted and nurtured to make greenbelt more dense.
- 9.2.22 The proponent has mentioned that there is no court case or violation under EIA Notification to the project or related activity.

Observations of the Committee:

- 9.2.23 The compliance of the EC was monitored by Regional Office when the plant was not in operation.
- 9.2.24 The Project is located in the Ganga basin and Notification 7th October 2016 is applicable wherein no discharge of treated /untreated effluent directly or indirectly is permitted in /tributaries of Ganga.

Recommendations of the Committee:

- 9.2.25 After detailed deliberations, the committee sought additional information on the following issues.
- i. Explore the possibility for recycling the effluents and prepare action plan for using the same in the plant in accordance with the requirement of Notification, SO 3086 7th October 2016.
 - ii. As no additional groundwater abstraction is allowed, the project proponent should explore the possibility of using surface water and water from rainwater harvesting and storage and other surface sources.
 - iii. The estimated emissions from recovery boiler and power plant shall be revisited.
 - iv. As the usage of pet coke is not permitted, alternative plan should be submitted.
 - v. Certified Compliance report of existing EC from Regional Office, MoEF&CC shall be furnished.

9.3 Changes in plant configuration for proposed Expansion of Integrated Steel Plant from 5.0 MTPA to 10 MTPA by M/s JSW Steel Ltd., located at village Dolvi, District Raigad, Maharashtra. [Online Proposal No. IA/MH/IND/41055/2015, File No. J-11011/76/2013-IA II (I)] Amendment In Environmental Clearance regarding

- 9.3.1 The Integrated Steel Plant of M/s JSW Steel Ltd., located in Village Dolvi, Pen Tehsil, Raigad District, Maharashtra State, has been granted Environmental Clearance (EC) for

expansion of its crude steel capacity from 5 MTPA to 10 MTPA vide letter no J-11011/76/2013-IA II (I) dated 25th Aug, 2015. The plant's current annual production capacity is **5 MTPA** of crude steel. The unit is located on the west coast of India and receives its raw materials through the jetty of JSW Dharma tar , with a capacity of 34 million tonnes per annum. Necessary consent to Operation (CTO) for the operating units has been obtained and are valid up to 2022-23.

- 9.3.2 In the earlier proposal for expansion from 5 MTPA to 10 MTPA, JSW Steel had proposed setting up of two identical sinter plants of 4 MTPA for sinter production and one pellet plant of 4 MTPA of Pellet productions. JSW is now proposing to reduce the capacity of sinter plants from 8 MTPA to 4 MTPA and to increase the capacity of pellet plant from 4 MTPA to 9 MTPA. However, there is no change in the capacity and configuration of other units for which the EC has been granted.
- 9.3.3 The project was appraised by the Expert Appraisal Committee (Industry) [EAC(I)] during its 2nd meeting held on 10 to 12 December 2018 and prescribed ToRs to the project for under taking EIA study for the amendment of environmental clearance without Public hearing. MoEF&CC has issued standard ToR and Additional ToR to the proposed project on 21/12/2018 vide Letter F No IA-J-11011/76/2013-IA.II (I).
- 9.3.4 Environment Impact Assessment (EIA) report has been prepared by NEERI for proposed changes in configuration of sinter and pellet plants in the expansion from 5 MTPA to 10 MTPA. The relevant documents have been uploaded on the MoEF&CC portal on 16th July 2019 namely; Form 2, Plant Lay out map, EIA report, Feasibility report and Certified compliance report of RO MoEF&CC, Nagpur.
- 9.3.5 With the proposed changes in the configuration of Sinter & Pellet plants, the revised capacities of these Units will be as under.

Sl No.	Unit Name	Existing Capacity at 5 MTPA Stage	Addl. Proposed Capacity under 5 to 10 MTPA Expansion as per previous EC	Revised Unit Capacity under 5 to 10 MTPA Expansion	Total Plant Capacity at 10 MTPA after present proposal	Remarks
2	Pellet Plant	4.0 MTPA	4.0 MTPA	9.0 MTPA	13.0 MTPA	Increase by 5MTPA
4	Sinter Plant	6.0 MTPA	8.0 MTPA	4.0 MTPA	10.0 MTPA	Decrease by 4 MTPA

- 9.3.6 The technological process route adopted for the project is based on proven BF-BOF route for steel making. The liquid steel will be cast into billets and slabs and further processed in rolling mills for production of different grades of steel. The expansion is based on combination of Pellet & Sinter as Iron Ore burden in the form of agglomerates.

- 9.3.7 JSW Steel, Dolvi works has a total of 1800 acres of land under its possession in which it operates the existing 5 MTPA integrated steel plant and the new facilities will be installed in the land area available with JSW Steel.
- 9.3.8 Ground water quality has been monitored in 8 locations in the study area and analysed. The result show variation of pH: 6.8-7.6, total dissolved solids: 146-528 mg/l, chlorides: 20-189 mg/l, sulphate: 0.6-10 mg/l, total alkalinity: 115-272 mg/l and total hardness: 100-280 mg/l. Nutrients as nitrate-NO₃ were observed in the range 0.04-1.40 mg/l and COD was in the range of 13-65 mg/l. The analysis of heavy metals in water are within the limits.
- 9.3.9 Surface water samples were analysed at 17 locations. The pH was found to be varying from 7.1-8.3, whereas alkalinity was in the range of 132- 1110 mg/l. The total suspended solids vary from 14-266 mg/l and Chlorides were in the range of 7807-19540 mg/l. Dissolved oxygen was found in the range of 2.2-5.7 mg/l and Nitrate as NO₃ was in the range of 1.30-3.27mg/, showing sea water ingress on the NW side of the plant.
- 9.3.10 Ground water & Surface water samples were analysed for Potable water quality, and was found to be within drinking water standards, except for Amba river quality which is saline due to tidal effects.
- 9.3.11 The total water requirement at 10 MTPA is 3851 m³/h, necessary allocation has been received for additional quantity is approved by the Irrigation department. Ground water is not used for Domestic & Industrial applications.
- 9.3.12 Wastewater treatment facilities are installed in individual process for recycling. The blow down from the re circulating systems complying to the applicable standards is led to collection tank for marine discharge. A necessary approval from the relevant authorities is being obtained. In order to conserve fresh water, measures like use of dry Gas cleaning plants (BF/ BOF, Coke quenching), Rainwater Harvesting and Water recovery from treated wastewater are also planned to achieve the specific water consumption of <2.5 m³/tcs.
- 9.3.13 The power requirement for additional 5.0 MTPA is about 376 MW and will be made available by MSEB grid, at 220 kV from MSEB grid sub-station located near the plant site. Once the new 5 MTPA expansion plant operation stabilize, in addition of gas based captive power plants, some electrical power will also be available from the top pressure recovery turbine generators of the blast furnaces and Coke dry quenching unit of DCPL & ARCL
- 9.3.14 Baseline Environmental Studies were conducted during Post monsoon season i.e., from November 2018 to January 2019. The meteorological data for November, December'18 and January'19 was obtained from Lake International Software. The predominant wind direction is blowing from NE to SW.
- 9.3.15 Ambient air quality monitoring has been carried out at 8 locations during November 2018 to January 2019 and the results indicate: PM₁₀ varied from 149.4 to 307 µg/m³, PM_{2.5} varied from 72.6 to 132.8 µg/m³, SO₂ from 1.6 to 9.3 µg/m³) and NO₂ varied from 6.3 to 14.1 µg/m³. The high levels of PM₁₀ is mainly due to the fugitive dust emission from widening and four lane construction of National Highway by NHAI.

- 9.3.16 The day time noise levels are in the range of 55.8-96.4 dB(A) and night time in the range of 41.7 to 77.2 dB(A). The high levels of noise are mainly due to large vehicular movement.
- 9.3.17 JSWSL will be implementing the steam box technology in the SMS to ensure weathering of steel slag for use as construction aggregates. Further, all solid waste will be gainfully utilised.
- 9.3.18 The capital cost of the project is Rs17000 Crores and the capital cost for environmental protection measures in the expansion from 5MTPA to 10 MTPA is Rs 2370 Crores. The annual recurring cost towards the environmental protection measures is estimated to be Rs. 300 Crores .
- 9.3.19 The employment generation (direct & indirect) from the proposed project / expansion is estimated to be 5000.The detailed CSR plan and Corporate Environment Responsibility (CER) Plan has been provided in the EMP chapter of the EIA report. Under CER, allocation of Rs. 118 Cr is earmarked.
- 9.3.20 Greenbelt will be developed in line with the recommendation of Expert appraisal Committee (EAC) in its 19th and 20th meeting dated 8th -9 th June, 2017 & 11 th -12th July, 2017.A total 1065 acre area will be developed for tree plantation and Green belt.
- 9.3.21 JSW Steel Ltd., Dolvi has no pending court cases or violation under EIA Notification.

Observations and Recommendations of the Committee:

- 9.3.22 The report is not as per the generic structure mentioned in Appendix -III of EIA Notification, 2006.
- 9.3.23 Report was uploaded in the name of NEERI on the portal and EIA consultant present in the meeting is M/s JM Environet Pvt Ltd. Disclosure of consultant was not mentioned in the EIA report.
- 9.3.24 After detailed deliberations, the committee returned the **proposal in the present form.**
- 9.4 Integrated Steel Complex at Sy. No. 158, part of 159,160,163-168 and 171 at Madhavaram and 13-19 at Village Rassamarri, Mandal Mantralayam, District Kurnool, Andhra Pradesh of M/s Maruti Ispat & Energy Pvt. Ltd. [Online Proposal No. IA/AP/IND/107813/2019, File No. J-11011/1149/2007-IAII(I)]– Prescribing of Terms of Reference regarding**

- 9.4.1 **M/s. Maruti Ispat and Energy Pvt. Ltd.**is planning expansion of steel plant at sy. No. 158,159, 160, 163-168 & 171,Village- Madhavaram and Rassamarri, Mandal-Mantralayam, District- Kurnool, Andhra Pradesh. The company has obtained Environmental Clearance for the existing units vide F.No. J-11011/1149/2007-IA II (I) dated 02.01.2009 for integrated steel complex at Sy. No. 158,159, 160, 163-168 & 171, village Madhavaram and 13-19 of village Rassamarri. Company has also taken EC extension on 16.12.2016. But till date company has installed only 4 X 100 TPD sponge iron plant and 8 MW WHRB Plant. As the validity of Environment Clearance was expired on 1/01/2019, the management planned to file the application for Terms of reference as per the guidelines of EIA notification 2006.

S. no	Unit	Plant Configuration	Production Capacity	work Status till Existing EC validity
1	Palletization Plant (Pellets)	1 x 3000 TPD	9,00,000 TPA	About 5% Work Completed
2	Sintering Plant (Sinter)	1 x 2000 TPD	6,00,000 TPA	About 5% Work Completed
3	Sponge Iron Kilns (Sponge Iron)	6 x 100 TPD	1,80,000 TPA	4 x 100 TPD – is in Operation Remaining 2 x 100 TPD to be Implementation
4	Mini Blast Furnace (Hot Metal/Pig Iron)	1 x 380 m ³	2,40,000 TPA	About 10% Work Completed
5	Induction Furnace (Billets from CCM)	2 x 40 TPH	2,40,000 TPA	About 15% Work Completed
6	Billets Casting Machine/ Continuous Casting Machine	1 x 1000 TPD	3,00,000 TPA	About 10% Work Completed
7	Rolling Mill	1 x 1000 TPD	3,00,000 TPA	About 5% Work Completed
8	Power Generation	Through WHRB	6 x 10 TPH 20 MW	8 MW WHRB – is in Operation
		Through FBC	2 x 100 TPH 2 x 18 MW	About 5% Work Completed
9	Ladle Furnace	1 x 40 TPH	---	About 5% Work Completed
10	Oxygen Plant	---	97,92,000 SM ³ /Annum	About 5% Work Completed

9.4.2 The project proponent submitted an application in the prescribed format along with Form-1 and other reports to the Ministry online on 20th June 2019 vide Online Proposal No. IA/AP/IND/107813/2019.

9.4.3 The proposed unit will be located at sy. No. 158,159, 160, 163-168 & 171, Village-Madhavaram and Rassamarri, Mandal- Mantralyam, District- Kurnool, Andhra Pradesh.

9.4.4 The land area acquired for the proposed plant is 60.7ha. 100% land is Un-irrigated Land. No /forestland involved. The entire land has been acquired for the project. Of the total area 20.3 ha (33.3%) land will be used for green belt development.

Sr. No.	Particulars	Area (ha)	Area (%)
1	Built-up Area	17.82	29.35
2	Green Belt Area	20.3	33.44
3	Parking Area	8.13	13.41
4	Road Area	7.38	12.15
5	Open Area	7.07	11.65
	Total	60.7	100

9.4.5 No national park/wildlife sanctuary/biosphere reserve/tiger reserve/elephant reserve etc. are reported to be located in the core and buffer zone of the project. The area also does not report to form corridor for Schedule-I fauna.

9.4.6 Total project cost is approx.700Crore rupees. Proposed employment generation from proposed project will be 450 direct employment and 300indirect employment.

9.4.7 The targeted production capacity of is given below:

S. no	Unit	Plant Configuration	Production Capacity
1	Palletization Plant (Pellets)	1 x 3000 TPD	9,00,000 TPA
2	Sintering Plant (Sinter)	1 x 2000 TPD	6,00,000 TPA
3	Sponge Iron Kilns (Sponge Iron)	6 x 100 TPD	1,80,000 TPA
4	Mini Blast Furnace (Hot Metal/Pig Iron)	1 x 380 m ³	2,40,000 TPA
5	Induction Furnace (Billets from CCM)	2 x 40 TPH	2,40,000 TPA
6	Billets Casting Machine/ Continuous Casting Machine	1 x 1000 TPD	3,00,000 TPA
7	Rolling Mill	1 x 1000 TPD	3,00,000 TPA
8	Power Generation	Through WHRB	20 MW
		Through FBC	2 x 18 MW
9	Ladle Furnace	1 x 40 TPH	---
10	Oxygen Plant	---	97,92,000 SM ³ /Annum

9.4.8 The ore for the plant will be procured from open market and Transportation will be done

9.4.9 The electricity load of 56 MW will be procured from Captive Power Plant and Andhra Pradesh State Electricity Board. Proposed raw material requirement for project are iron ore, Dolomite and coal. The requirement would be fulfilled by open market.

9.4.10 Water Consumption for the proposed project will be 1650 KLD and wastewater generation will be zero. Domestic wastewater will be treated STP and Treated wastewater will be used for Greenbelt Development.

Input	Quantity (KLD)	Output	Quantity (KLD)
Makeup Water for cooling	969	Cooling tower blow down	235
		Losses	734

Input	Quantity (KLD)	Output	Quantity (KLD)
Boiler Feed Makeup	681	Blow down	158
		Losses	523
Total	1650		1650

9.4.11 The proponent has mentioned that there is no court case or violation under EIA Notification to the project or related activity.

9.4.12 Environmental Consultant Name: Sri Sai Manasa Nature Tech. Pvt. Ltd., Hyderabad (in Association with Eco Chem Sales and Services, Surat), Certificate no.: NABET/EIA/1720/RA0111, valid till 05.08.2020.

Observations and Recommendations of the Committee:

9.4.13 The committee observed that the information furnished in Form -I and prefeasibility report is inadequate to take decision on the proposal. After detailed deliberations, **the committee returned the proposal in the present form.**

9.5 Integrated Cement Plant (Cement 4.0 Million TPA; Clinker 2.0 Million TPA), Captive Power Plant 25 MW, WHRS 20 MW along with DG Sets of 2000 KVA (1000/500/250/125 KVA) and Residential Colony of 599 units (Build-up area 136766 m²) **M/s Shree Cement Ltd.**, located at Village Gothra, Tehsil Nawalgarh, District Jhunjhunu, **Rajasthan** [Online Proposal No. IA/RJ/IND/109426/2019 File No. J-11011/1173/2007-IAII(I)]– Prescribing of **Terms of Reference** regarding

9.5.1 M/s. Shree Cement Ltd. proposed to install a new Integrated Cement Plant (Cement 4.0 Million TPA; Clinker 2.0 Million TPA), Captive Power Plant 25 MW, WHRS 20 MW along with DG Sets of 2000 KVA (1000/500/250/125 KVA) and Residential Colony of 599 units (build-up area 136766 m²) near Village Gothra, Tehsil Nawalgarh, District Jhunjhunu, (Rajasthan). It is proposed to set up the plant for manufacturing of cement and clinker based on dry process technology. The project proponent submitted an application in the prescribed format along with Form-1 and other reports to the Ministry online on 28th June, 2019 *vide* Online Application No. IA/RJ/IND/109426/2019.

9.5.2 The above project was earlier accorded environmental clearance vide Letter No. J-11011/1173/2007-IA II (I) which was expired on 14th July, 2019 due to expiry of EC validity. Now, the company is applying afresh for obtaining Environmental Clearance proposed Integrated Cement Plant (Cement 4.0 Million TPA; Clinker 2.0 Million TPA), Captive Thermal Power Plant 25 MW, WHRS 20 MW along with DG Sets of 2000 KVA (1000/500/250/125 KVA) and Residential Colony of 599 units (build-up area 136766 m²) near Village Gothra, Tehsil Nawalgarh, District Jhunjhunu, (Rajasthan).

9.5.3 The proposed unit is located near Village: Gothra, Taluka: Nawalgarh, District: Jhunjhunu, State: Rajasthan.

- 9.5.4 The land area acquired for the plant is 145.71ha (RIICO industrial area 142.16 ha + Govt Land 3.55 ha);out of which, 117.71 ha is proposed to setup the plant(including 52.5 ha is a common area of mine lease and plant) and remaining 28 ha area is proposed for colony setup which is an industrial land. No forest land is involved. Out of 145.71 ha of total area, 142.16 ha land has been acquired for the project through RIICO and remaining 3.55 ha of Govt. land is under process of allotment. Out of total area, 48.0 ha (i.e. 33% of the total land area) will be used for Greenbelt development.
- 9.5.5 No National Park, Wildlife Sanctuary, Biosphere Reserve, Tiger Reserve, Elephant Reserve etc. are reported to be located in the core and buffer zone of the project. The area also does not report to form corridor for Schedule-I fauna.
- 9.5.6 Total project cost is approx. Rs. 1660 Crores (Cement Plant: Rs. 1200 Crore, CPP & WHRS: Rs. 220 Crore, Colony: Rs. 150 Crore and Land & site development: Rs. 90 Crore). Proposed employment generation from proposed project will be 500 direct employments and 1000 indirect employments.
- 9.5.7 The targeted production capacity of Integrated Cement Plant- (Cement 4.0 Million TPA; Clinker 2.0 Million TPA), Captive Power Plant 25 MW, WHRS 20 MW along with DG Sets of 2000 KVA (1000/500/250/125 KVA) and Residential Colony of 599 units (build-up area 136766 m²). The limestone will be sourced from adjacent Captive limestone mine through covered conveyor belt; Laterite, Iron ore, mill scale will be sourced from Bhilwara and other locations, Lead zinc slag from HZL Chittorgarh (Raj) and nearby area by road; Synthetic Gypsum will be sourced from sister units of SCL, Chemical Gypsum, Mineral Gypsum will be sourced from Nagaur and Bikaner (Rajasthan) by road & rail. The Proposed capacity for different products for new site area is as below:

Unit	Proposed Capacity
Clinker (Million TPA)	2.0
Cement (Million TPA)	4.0
WHRs (MW)	20
CPP (MW)	25
DG Set (KVA)	2000 KVA (1000/500/250/125 KVA)
Residential Colony	599 units (build-up area 136766 m ²)

- 9.5.8 The electricity load of 32 MW will be sourced from proposed WHRS (20 MW), CPP (25 MW). Till installation of the proposed captive thermal power plant, the required power will be received from Grid. Company has also proposed to install 2000 KVA (1000/500/250/125 KVA) DG Sets.
- 9.5.9 Proposed Raw materials required for the project are Limestone; which will be sourced from adjacent Captive limestone mine through covered conveyor belt; Laterite will be sourced from Bhilwara by road; Lead Zinc Slag will be sourced from HZL Chittorgarh (Raj) by road and Iron ore, Mill scale will be sourced from Nearby area by road; Synthetic Gypsum will be sourced from sister units of SCL, Chemical Gypsum, Mineral Gypsum will be sourced from Nagaur and Bikaner (Rajasthan) by road & Rail; Fly ash& pond ash will be sourced from Panipat Thermal Power Station / nearby TPP & CPP by road. Clinker 2.0 Million TPA will be sourced from proposed clinker unit and if required,

balance clinker will be sourced from sister units located at Beawar-Ajmer and Ras-Pali through road & rail. Fuel consumption will be mainly Indian & Imported Coal; Indian coal will be sourced from open market and imported coal will be sourced from USA/Australia/Indonesia/South Africa/Russia etc. Indian & Imported Petcoke as feed stock will be sourced from Indian Refineries such as IOCL Panipat Refinery & Reliance Refinery and imported from USA/Singapore/Malaysia/Gulf Countries etc.

- 9.5.10 Water Consumption for the proposed project will be 1200 KLD; which will be sourced from ground water and no wastewater will be discharged from the cement plant. Domestic wastewater will be treated in STP and treated water will be used for greenbelt development / plantation. RO reject will be used in mill spray and ash quenching. Boiler blow down water will be used for dust suppression in mill spray.
- 9.5.11 The proponent has mentioned that there is no court case or violation under EIA Notification to the project or related activity.

Observations of the Committee:

- 9.5.12 The proposal is for greenfield Integrated Cement Plant based dry process. The proposal also involves residential colony. Required limestone shall be sourced from captive mines.

Recommendations of the Committee:

- 9.5.13 After detailed deliberations, the Committee recommended the project proposal for prescribing following specific ToRs for undertaking detailed EIA and EMP study in addition to the generic ToR enclosed **at Annexure I read with additional ToRs at Annexure-2:**
- i. The project proponent shall make an application for grant of Environmental Clearance for construction of residential colony as per the Ministry's O.M. No. J-11013/41/2006-IA.II (I) dated 24/12/2010.
 - ii. The plant shall be designed with air cooled condensers.
 - iii. The plant shall be designed with provision for addition of alternate fuel.
 - iv. Action plan for Rainwater harvesting and its monitoring to the tune of 200% of annual water consumption.
 - v. Ensure the greenbelt 30-meter-wide along village boundary and incorporate in the plant layout plan.
 - vi. The plant shall be designed for ZLD.
 - vii. Public Hearing to be conducted by the concerned State Pollution Control Board.
 - viii. The issues raised during public hearing and commitment of the project proponent on the same along with time bound action plan to implement the commitment and financial allocation thereto should be clearly provided.
 - ix. The project proponent should carry out social impact assessment of the project and furnish the action plan for Corporate Environment Responsibility as per the Ministry's Office Memorandum vide F.No. 22-65/2017-IA.III dated 1/05/2018.

9.6 Enhancement of Pellet Plant Production Capacities from 2.2 MTPA to 2.5 MTPA (0.3 MTPA within the existing 1.75 MTPA steel plant of M/s. Monnet Ispat & Energy Limited (Joint Venture Company by AION & JSW Steel Ltd.) located at Village & P.O Naharpali, Tehsil Kharsia, District Raigarh, Chhattisgarh - [Online Proposal No. IA/CG/IND/109495/2019 File No. J-11011/196/2007-IAII(I)] – Prescribing of Terms of Reference – regarding

9.6.1 M/s. Monnet Ispat & Energy Limited (Joint Venture Company by AION & JSW Steel Ltd.) made an application vide online proposal no IA/CG/IND/109495/2019 dated 02/07/2019 along with the application in prescribed format (Form-I), copy of pre-feasibility report and proposed ToRs for undertaking detailed EIA study as per the EIA Notification, 2006 for the project mentioned above. The proposed project activity is listed at Sl. No. 3(a) Metallurgical industries (ferrous & non-ferrous) under Category “A” of the schedule of the EIA Notification, 2006 and appraised at Central Level.

Details submitted by the project proponent

9.6.2 M/s. Monnet Ispat & Energy Limited (Joint Venture Company by AION & JSW Steel Ltd.) has proposed to enhance the Pellet Plant Production Capacities from 2.2 MTPA to 2.5 MTPA (0.3 MTPA within the existing 1.75 MTPA steel plant located at Village & P.O Naharpali, Tehsil Kharsia, District Raigarh, Chhattisgarh.

Observations of the Committee

9.6.3 The committee noted that project proponent has not furnished the information regarding implementation status of the existing environmental clearances and the information furnished in the Form I and Pre-feasibility founds to be inadequate. Further, the layout submitted by the project proponent was not at all legible.

Recommendations of the Committee

9.6.4 In view of above and after detailed deliberations, the Committee recommended to **return the proposal in present form.**

9.7 Expansion of Integrated Cement Plant (Clinker, Cement, WHRS & D.G. Set) by M/s. Dalmia Cement (Bharat) Limited located at Village: Yadwad, Taluka: Gokak, District: Belagavi (Karnataka) [Online Proposal No. IA/KA/IND/108113/2019 File No. J-11011/119/2007-IAII(I)]– Prescribing of Terms of Reference regarding

9.7.1 M/s. Dalmia Cement (Bharat) Ltd. proposes for an expansion of Integrated Cement Plant - (Clinker, Cement, WHRS & D.G. Set) at Village: Yadwad, Taluka: Gokak, District: Belagavi (Karnataka). It is proposed to set up the plant for manufacturing of cement/clinker based on dry process technology. The project proponent submitted an application in the prescribed format along with Form-1 and other reports to the Ministry online on 14th June 2019 vide Online Application No. IA/KA/IND/108113/2019.

9.7.2 The existing project was accorded environmental clearance vide letter no J-11011/119/2007-IA (II)-Idated 24th June, 2008, validity extended for three years w.e.f. 23rd June, 2013 vide letter no. J-11011/119/2007-IA II (I) dated 11th August 2014.

Consent to Operate was accorded by Karnataka State Pollution Control Board *vide* letter no. AW - 302874, dated 17th June, 2017 validity of CTO is up to 30th June, 2021.

- 9.7.3 The expansion is proposed at existing unit located at Village: Yadwad, Taluka: Gokak, District: Belagavi, State: Karnataka.
- 9.7.4 The land area acquired for the plant is 169.24 ha; out of which, existing plant area is 159.93 ha and 9.31 ha area is proposed for additional worker colony. No forest land is involved. Out of the total project area requirement of 179.68 ha, 169.24 ha area is under the possession of DCBL and remaining 10.44 ha area adjacent to existing plant area will be acquired for proposed expansion. Out of total land area about 60.54 ha (i.e. 33% of the total land area) will be used for Greenbelt development/plantation.
- 9.7.5 No National Park / Wildlife Sanctuary / Biosphere Reserve/ Tiger Reserve/ Elephant Reserve etc. are reported to be located in the core and buffer zone of the project. The area also does not report to form corridor for Schedule-I fauna.
- 9.7.6 Total project cost is approx. 4200 Crores rupees @ Rs. 2100 Crore estimated for each line. The existing manpower for the plant is 788 persons. Proposed additional employment generation from proposed expansion project will be 1120 direct employments (regular & contractual) during operation phase and about 2000 during construction phase and 3000 indirect employments.
- 9.7.7 The targeted production capacity of Integrated Cement Plant- Clinker (9.1 MTPA), Cement (9.0 MTPA), WHRS (42 MW), CPP (27 MW) and DG set (3000 KVA). The Limestone, Laterite, Slag, Gypsum, Fly ash and other additives is being / will be transported through road. The proposed capacity for different products for new site area is as below:

Unit	Granted Capacity as per EC dated 24 th June, 2008	Existing Installed Capacity (Line - I)	Additional Proposed Capacity		Total capacity after expansion
			Existing Line - I	New Line - II & III	
Clinker (MTPA)	2.6	2.6	Nil	2 x 3.25	9.1
Cement (MTPA)	4.0	2.5	1.5	2 x 2.5	9.0
WHRS (MW)	Nil	Nil	12	2 x 15	42
CPP (MW)	40	27	Nil	Nil	27
DG Set	-	2 x 500 KVA	-	2 x 1000 KVA	3000

- 9.7.8 The electricity load of 115 MW will be sourced from proposed WHRS (42 MW), CPP (27 MW) and State Grid (46 MW). Company has also proposed expansion of 3000 kVA DG Set.

- 9.7.9 Proposed Raw materials required for the project are Limestone; which is being / will be sourced from its Captive Mine; Laterite is being / will be purchased from Belgaum, Karnataka; Slag is being / will be sourced from Bellary, Karnataka; Gypsum is being / will be purchased from Tuticorin, Kerala and Bikaner, Rajasthan; Fly ash is being / will be purchased from CPP/NTPC Bijapur and other additives like red mud, sandstone, grinding aids etc. is being /will be purchased from Belgaum, Karnataka. Fuel consumption will be mainly Coal/Petcoke, Indian Coal which is being / will be purchased from SCCL/WCL, Telangana/Maharashtra; Indonesian Coal is being / will be purchased from Indonesia through Jaigad port/Mangalore Port; South African Coal is being / will be purchased from South Africa through Jaigad port/Mangalore Port; Petcoke is being / will be purchased from MRPL and Imported (Mangalore &Jaigad Port)and Black Carbon/ AFR is being / will be purchased from Hyderabad.
- 9.7.10 Water Consumption after the proposed expansion will be 7300 KLD; which will be sourced from Ground water / Surface water / Existing rainwater harvesting sumps within plant area and Mine pit rainwater.RO reject water & boiler blow down water will be used for dust suppression after proper neutralization. At various stages water used for cooling will be absorbed/evaporate throughout the process. Domestic wastewater generated from plant is being/will be treated in STP and treated water is being/will be used for greenbelt development / plantation.
- 9.7.11 The proponent has mentioned that there is no court case or violation under EIA Notification to the project or related activity.

Observations of the committee:

- 9.7.12 Project involves 6 stage air preheaters in the process flow. Application mentions all sources of water to meet requirement of water.
- 9.7.13 Some discrepancies were found in Form -I for which committee asked the PP to rectify the same during meeting. The PP submitted the updated Form -I to the Committee.

Recommendations of the committee:

- 9.7.14 After detailed deliberations, the Committee recommended the project proposal with following specific ToRs for undertaking detailed EIA and EMP study in addition to the generic ToR enclosed **at Annexure I read with additional ToRs at Annexure-2:**
- i. No groundwater abstraction is allowed for proposed additional capacity. The existing abstraction of groundwater shall be phased out in 5 years. The action plan shall be furnished in the EIA report.
 - ii. Explore the possibility of railway siding. Action plan for laying the railway siding and maximum utilization of the same for transportation shall be furnished.
 - iii. Action plan for shifting of crusher to mines pit as per the progress of development shall be furnished.
 - iv. Action plan for Rainwater harvesting and its monitoring to the tune of 100% of annual water consumption.
 - v. The plant shall be designed for ZLD
 - vi. Public Hearing to be conducted by the concerned State Pollution Control Board.

- vii. The issues raised during public hearing and commitment of the project proponent on the same along with time bound action plan to implement the commitment and financial allocation thereto should be clearly provided.
- viii. The project proponent should carry out social impact assessment of the project and furnish the action plan for Corporate Environment Responsibility as per the Ministry's Office Memorandum vide F.No. 22-65/2017-IA.III dated 1/05/2018.

9.8 Ferro Alloys Manufacturing Plant by M/s Shri Hari Ferro Alloys Private Limited located at No. 1369 (part), Village & Mandal Bhiknoor, District Kamareddy, **Telangana**. [Online Proposal No. IA/TG/IND/108289/2019; File No. J-11011/236/2019-IAII(I)]– Prescribing of **Terms of Reference** regarding

- 9.8.1 M/s. Shri Hari Ferro Alloys Pvt. Ltd. proposes to install Phase – II : 1 x9 MVA Furnace. 1 x 7 MVA furnace of Phase – I is already installed and is under operation. It is proposed to set up the plant for Manufacturing of Ferro Alloys based on Electric Arc Furnace. The project proponent submitted an application in the prescribed format along with Form-1 and other reports to the Ministry online on 05.07.2019 vide Online Application No. IA/TG/IND/108289/2019.
- 9.8.2 The 7 MVA furnace of Phase – I & 9 MVA furnace of Phase - II was accorded environmental clearance vide File no. F. No. J-11011/973/2008 –IA II (I) dated 18.09.2009. Consent to Operate for 7 MVA Furnace was accorded by Telangana State Pollution Control Board vide Order No. TSPCB/RCP/NZB/HO/CFO/2019 dated 17.04.2019 and validity of CTO is up to 30.06.2016. M/s. Shri Hari Ferro Alloys Pvt. Ltd. has applied for renewal of CFO and renewal order will be obtained shortly.
- 9.8.3 The Ferro Alloy Manufacturing unit is located at 1369 (Part) Village: Bhiknoor, Taluka: Bhiknoor, District: Kamareddy, State : Telangana.
- 9.8.4 The land area acquired for the plant is 8.92 Ac. (3.61 Ha.). Entire land of 3.61 ha. is agricultural land. No forestland is involved. The entire land has been acquired for the project. Of the total area of 3.61 ha, 1.26 ha. (33%) land will be used for green belt development.
- 9.8.5 No national park/ wildlife sanctuary/ biosphere reserve/ tiger reserve/ elephant reserve etc. are reported to be located in the core and buffer zone of the project. The area also does not report to form corridor for Schedule-I fauna.
- 9.8.6 Total project cost is approx. Rs. 30.70 Crore rupees (Phase – I : Rs. 13.5 Crores; Phase – II : Rs. 17.2 Crores). Total Employment will be 110 (Phase – I : 50; Phase – II : 60). Proposed employment generation for Phase - II will be 60 direct employment and 10 indirect employment.
- 9.8.7 The targeted production capacity of the 7 MVA & 9 MVA furnace is given as below:

Phases	Phase -1 (Existing Capacity)	Phase-2 (Proposed to implement)
Furnace Capacity	7 MVA	9 MVA
Ferro Silicon (TPA)	4925	6333
Silico Manganese (TPA)	11088	14250
Ferro Manganese	14784	18500
Total	30797	39083

9.8.8 Raw Materials and Resources:

Raw Materials	Sources	Mode of transportation	Distance from plant site
Manganese Ores	SMIORE, Karnataka; MOIL, Maharashtra	Trucks	500 km
Coal	Jharkhand	Train /truck	1500 km
Coke	Dhanbad- Jharkhand	Train /truck	1500 km
Quartz	Local mines	Trucks	Within 100 km
Magnesite	Andhra Pradesh	Trucks	250 km
Electrode paste	Chattisgarh, Bihar, West Bengal	Train /truck	
Dolomite	Kurnool, Andhra Pradesh	Train/ truck	200 km

9.8.9 The electricity load of 18 MVA (Phase – I : 8 MVA & Phase – II : 10 MVA) be procured from TSSPDCL. Company has also installed 250 KVA DG set for emergency power back up. Also proposed to install another DG Set of 250 KVA for proposed 9 MVA Furnace.

9.8.10 After detailed deliberations, the Committee recommended the project proposal **with** following specific ToRs for undertaking detailed EIA and EMP study in addition to the generic ToR enclosed **at Annexure I read with additional ToRs at Annexure-2:**

- i. Fourth hole for extraction of fumes shall be provided for proposed SAF and furnish the details.
- ii. Plant shall be designed for 100 % waste utilization.
- iii. Replace side hood extraction in the existing 7mVA furnace with fourth hole extraction and furnish the details in the EIA report.
- iv. The plant shall be designed for ZLD.
- v. Public Hearing to be conducted by the concerned State Pollution Control Board.
- vi. The issues raised during public hearing and commitment of the project proponent on the same along with time bound action plan to implement the commitment and financial allocation thereto should be clearly provided.

- vii. The project proponent should carry out social impact assessment of the project and furnish the action plan for Corporate Environment Responsibility as per the Ministry's Office Memorandum vide F.No. 22-65/2017-IA.III dated 1/05/2018.

9.9 Proposed Expansion of Ferro Alloy Plant (SAF 1x9 MVA) by installation of 3x5 MVA SAFs and Ferro-Chrome Briquetting Plant (10 TPH) by M/s. Metsil Exports Private Limited located at Basudebpur (North), Barjora, District Bankura, West Bengal. [Online Proposal No. IA/WB/IND/110534/2019, File No. J-11011/371/2009-IAII(I)] Prescribing of Terms of Reference – regarding

9.9.1 M/s. Metsil Exports Private Limited made an application vide online proposal no IA/WB/IND/110534/2019 dated 09/07/2019 along with the application in prescribed format (Form-I), copy of pre-feasibility report and proposed ToRs for undertaking detailed EIA study as per the EIA Notification, 2006 for the project mentioned above. The proposed project activity is listed at Sl. No. 3(a) Metallurgical industries (ferrous & non-ferrous) under Category “A” of the schedule of the EIA Notification, 2006 and appraised at Central Level.

Details submitted by the project proponent

9.9.2 M/s. Metsil Exports Private Limited has proposed for expansion of existing ferro-alloy plant (SAF 1x9 MVA) by installation of 3 x 5 MVA Submerged Arc Furnaces for production of 29,000 TPA Si-Mn or 37,600 TPA Fe-Mn or 28,320 TPA Fe-Cr or 12,660 TPA Fe-Si and Ferro-Chrome Briquetting Plant (10 TPH) on the available vacant area within the existing plant premises of total area 5.75 hectares (14.2 acres) of land.

9.9.3 The details of the existing and proposed configuration and production capacities are given as below.

Units	Existing	Proposed	Total
Ferro Alloy Plant	SAF (1x9 MVA) (17,400 TPA Si-Mn or 22,600 TPA Fe-Mn or 17,000 TPA Fe-Cr or 7,600 TPA Fe-Si)	SAFs (3x5 MVA) (29,000 TPA Si-Mn or 37,600 TPA Fe-Mn or 28,320 TPA Fe-Cr or 12,660 TPA Fe-Si)	SAFs (1x9 MVA + 3x5 MVA) (46,400 TPA Si-Mn or 60,200 TPA Fe-Mn or 45,320 TPA Fe-Cr or 20,260 TPA Fe-Si)
Briquetting Plant	-	10 TPH Briquette	10 TPH Briquette

9.9.4 Environmental clearance for setting up 1x9 MVA Submerged Arc Furnace was obtained from MoEF&CC vide Letter. No. J/11011/371/2009-IA.II.(I) dated 21.06.2010 An application was made on 02.02.2016 for amendment in the above mentioned EC. Amended EC was granted on 16.12.2016. Consequently, Consent to Establish (NOC) was obtained vide memo no. 05-2N-54/2009(E) dated 02.01.2017. Consent to Operate (CTO) for the

above mentioned project was obtained vide Consent Letter No. CO107882 and Memo No. 1705/dr-CO-S/11/1858 dated 15.05.2018.

- 9.9.5 The proposed unit is located at Basudebpur (North), Barjora, District - Bankura West Bengal. Its geographical co-ordinates are Latitude 23°24'16.80"N and Longitude 87°17'39.60"E with above mean sea level (AMSL) 263 ft.
- 9.9.6 The proposed expansion project will be installed on the available vacant area within the existing plant premises of total area 5.75 hectares (14.2 acres) of land. The entire land has been acquired for the project. No forest land is involved. Of the total area 1.89 ha (33%) land will be used for green belt development.
- 9.9.7 No national park / wildlife sanctuary / biosphere reserve / tiger reserve / elephant reserve etc. are located in the core and buffer zone of the project. The area also does not report to form corridor for Schedule-I fauna.
- 9.9.8 Total project cost is approx. Rs. 25 Crores. The estimated manpower requirement will be about 200 persons. The targeted production capacity of the proposed 3x5 MVA SAFs is 29,000 TPA Si-Mn or 37,600 TPA Fe-Mn or 28,320 TPA Fe-Cr or 12,660 TPA Fe-Si and Ferro-Chrome Briquetting Plant (10 TPH) is 10 TPH Ferro-Chrome briquettes. The raw material transportation will be done through Rail and road linkages.
- 9.9.9 Existing power requirement is about 9000 KVA. Additional 15000 KVA shall be required for the expansion project and will be sourced from DVC (Damodar Valley Corporation). For emergency purpose 125 KVA DG apart from existing 100 KVA DG set shall be installed.
- 9.9.10 Proposed raw materials and fuel requirement for major products of the project are as follows.

RAW MATERIAL	QUANTITY (TPA)
Ferro Chrome- 28,320 TPA	
Briquette	56640
Quartzite	5664
Coke	15293
Electrode Paste	396
Chrome Ore	11328
or Ferro Silicon – 12,660 TPA	
Steam Coal / Charcoal	15192
Coke	2532
Wood chips	1266
Quartzite	25320
Electrode Paste	633
Mill Scales	4557
or Ferro manganese - 37,600 TPA	
Steam Coal	9776
Coke	13912
Electrode Paste	564
Dolomite	7520

RAW MATERIAL	QUANTITY (TPA)
Manganese Ore	94000
or Silicon Manganese – 29,000 TPA	
Steam Coal	105
Coke	11165
Dolomite	5075
Quartzite	11600
Electrode Paste	638
Manganese Ore	69600

- 9.9.11 Water to the tune of 120 KLD will be needed for the proposed expansion project. Total water demand for the project shall be 160 KLD. (Existing: 40 KLD + Expansion: 120 KLD). Domestic wastewater will be treated in septic tank - soak pit and industrial waste water generated will be treated in water treatment facility and reused completely.
- 9.9.12 The proponent has mentioned that there is no court case or violation under EIA Notification to the project or related activity.
- 9.9.13 Name of the consultant: M/s. Envirotech East Private Limited [S.No. 52, List of Accredited Consultant Organizations (Alphabetically) Rev. 78, July 10, 2019].

Observations and recommendations of the Committee:

- 9.9.14 After detailed deliberations, the Committee recommended the project proposal with following specific ToRs for undertaking detailed EIA and EMP study in addition to the generic ToRs enclosed at **Annexure-1 read with additional ToRs at Annexure-2**.
- i. Unit shall install bag house for control of emissions below 30 mg/Nm³.
 - ii. Action plan for rainwater Harvesting shall be furnished.
 - iii. Action plan for 100% solid waste utilization shall be submitted.
- 9.10 Proposed Modernization & Expansion of DCBL Dalmiapuram Cement Plant by **M/s. Dalmia Cement (Bharat) Limited** located at Survey no. 9, 10,11,12 etc in Village Palanganatham, Taluk Ariyalur and District Ariyalur in Tamil Nadu [Online Proposal No. IA/TN/IND/110821/2019, File No. J-11011/68/2004-IAII(I)]– **Prescribing of Terms of Reference – regarding**
- 9.10.1 **M/s. Dalmia Cement (Bharat) Limited** has made application vide online proposal no. IA/TN/IND/110821/2019 dated 11/07/2019 along with the application in prescribed format (Form-I), copy of pre-feasibility report and proposed ToRs for undertaking detailed EIA study as per the EIA Notification, 2006 for the project mentioned above. The proposed project activity is listed at Sl. No. 3(b) Cement Plants under Category “A” of the schedule of the EIA Notification, 2006 and appraised at Central Level.

Details submitted by the project proponent

- 9.10.2 M/s. Dalmia Cement (Bharat) Limited (DCBL) proposes to Modernize & Expansion of existing Dalmiapuram Cement Plant from existing 2.410 MTPA Clinker to 3.230 MTPA

and Cement from existing 4.020 MTPA to 5.814 MTPA based on improvement of existing Pyro Processing Systems, modernization of the machineries and also Pollution Control Measures up gradations.

9.10.3 The environmental clearances obtained for the existing plant is given as below:

EC for	EC Reference
Polysius Kiln & KHD Kiln (Line-I)	Plant before EIA Notification 1994
Line-I Cement Plant Expansion from 1.0 MTPA to 1.2 MTPA Cement	MoEF&CC F. No. J-11011/ 104/96-IA II dated 28.08.1997
Dalmiapuram Line-II (Increased Clinker by 1.32 MTPA & Cement by 2.2 MTPA from existing 1.09 MTPA Clinker & 1.82 MTPA Cement) along with 1x27 MW CPP	MoEF&CC F. No. J-11011/ 68/2004-IA II (I) dated 27.04.2005
Expansion of CPP with additional 1x23 MW	MoEF&CC F. No. J-13012/12/2007-IA.II(T) dated 17.05.2007

9.10.4 The Modernization & Expansion activities are proposed within the existing Plant Premises at Village: Palanganatham, Taluk& District: Ariyalur, State: Tamil Nadu.

9.10.5 The land area of the existing Cement Plant is 48.825 Ha (in total area of 65.725 Ha which includes Colony, etc.) out of which 0 Ha is an agricultural land, 0 Ha is grazing land and 48.825 Ha is others (Industrial Land). No Government Land/Forest Land is involved. The entire land has been acquired for the project. Of the total area 48.825 Ha, 15.095 Ha (22.97 %) land is used for green belt development in addition to 30.625 Ha of land outside the Plant area for greenbelt (Total greenbelt area - 45.720 Ha). No additional land is required for the Proposal.

9.10.6 Karaivetti Bird Sanctuary, Notified Eco Sensitive Zone vide S.O. 1909(E) dated 31.05.2019, is located at a distance of 8.1 km in East-northeast direction from the Site. The area also does not report to form corridor for Schedule-I Fauna.

9.10.7 Total Project Cost of Expansion is Rs.69.74Crores to existing Project Cost of Rs.1, 321.51Crores. There will be no additional employment generation. The existing is 914 direct employment and 500 Indirect employment.

9.10.8 The targeted production capacity of the Dalmiapuram Cement Plant is Clinker 3.230million TPA and Cement 5.814 million TPA. The Ore/Limestone for the plant would be sourced from DCBL Captive Limestone Mines in nearby Trichy and Ariyalur Regions. The ore transportation will be done through Road.

9.10.9 The existing and proposed capacity for different products is as below:

Name of Unit	No. of Units	Capacity of each Unit	Production Capacity
Clinker	Existing - 2 Lines (Line I & Line II)	Line I - 1.090 MTPA Line II - 1.320 MTPA	3.230 MTPA

Name of Unit	No. of Units	Capacity of each Unit	Production Capacity
	Proposed-Same Kilns	0.820 MTPA	
Cement	Existing - 2 Lines (Line I & Line II)	Line I - 1.820 MTPA Line II - 2.200 MTPA	5.814 MTPA
	Proposed-Same Lines	1.794 MTPA	
Captive Thermal Power Plant	Existing	1x27 MW&1x23 MW	50 MW
	Proposed	-	

9.10.10 The electricity load of 71.05 MW is met from existing CPP of 50 MW and also through TANGEDCO Grid (5,500 KVA). Company has also installed standby DG sets of 2x2MW and 2x4 MW.

9.10.11 The raw materials requirement and its mode of transportation is given as below:

Sl. No.	Raw Material	Source	Max. Demand, TPD	Mode of Transportation
1	Limestone	Captive Limestone mines in Trichy & Ariyalur District	11300	From crusher by closed conveyors to plant
2	Fire Clay	Local Market	255	Covered 20 Ton truck by road
3	Lignite/ Petcoke/ Coal	Neyveli Lignite Corporation (NLC)/ Imported/Local Mines	2000/ 1250/ 1600	Covered 20 Ton truck by road (50% 50% by Rail)
4	Synthetic and Chemical Gypsum	IL&FS & Greenstar Fertilizers, Thoothukudi	410	Covered 20 Ton truck by road
5	Fly ash	NLC, IL&FS, North Chennai Thermal Power Station	4255	20/40 Tons Browsers
6	Slag	Jindal Steel Plant, Salem	300	Covered 20 Ton truck by road
7	CPP : Lignite	NLC	762	Covered 20 Ton trucks by

Sl. No.	Raw Material	Source	Max. Demand, TPD	Mode of Transportation
				road
8	CPP : Coal	Local Coal Mines or Imports from USA/ SA/ Indonesia	590	Covered 20 Ton trucks by road

9.10.12 Water consumption for the proposed project will be an additional 480 KLD to existing 2,567 KLD. Domestic wastewater @ 352 KLD is treated in 500 KLD STP and reused fully for Greenbelt & Dust Control Measures and Industrial Wastewater @ 507 KLD from CPP is treated in 500 KLD ETP and reused in Cement Plant for Machineries Cooling. This requirement of water is presently drawn from Coleroon River through the existing water supply system to the plant. DCBL has already obtained permission for a withdrawal quantity of 3200 m³/day of water from Water Resource Organization, Cauvery Basin Circle, Tiruchirappalli in 1988 vide renewed GO No. 201 dated 22.09.2014.

9.10.13 The proposed modification in the existing plant along with its cost given as below:

Sl. No.	Proposed Modifications & Upgradations	Cost Involved, Rs. Lakhs
I	Installation of Selective Non-Catalytic Reduction (SNCR) System for NO _x reduction in the Kiln	200
II	Line-I Modifications & Upgradations	
1	Replacement of Kiln inlet and outlet graphite seal with ITECA seal	70
2	Up gradation of Coal ball mill classifier to grind Petcoke in Ball mill. Petcoke grinding in coal mill increased from 7 - 8 TPH to 12 TPH	24
3	Replacement of Kiln coal conveying blower with high speed turbo blower to optimize power and conveying air volume	88
4	Installation of Coriolis coal dosing system for stable firing and flow and measurement accuracy system which result in stable operation of Kiln	52
5	Replacement of Kiln Duo flex burner with latest generation Pyrojet burner from M/S KHD, thereby better flame control achieved	109
6	Integration of Line-I Central Control Room with Line-II	82
7	Purchase of new AFR shredding machine of capacity of 5 TPH	60
8	Up-gradation of Preheater fan	500
9	Up-gradation of Cooler	2000

Sl. No.	Proposed Modifications & Upgradations	Cost Involved, Rs. Lakhs
10	UP-gradation of Kiln main drive & Kiln feed bucket Elevator	190
11	Classifier for CVRM-1	22
12	Roller press with Ball mill	200
III	Line-II Modifications & Upgradations	
1	Replacement of Kiln inlet and outlet graphite seal with ITECA seal	30
2	Replacement of Kiln and PC coal firing PD blower with high speed turbo blower	99
3	Coriolis coal dosing system introduction for consistent fuel firing and for measurement accuracy which also reduces SHC due to stable operation of kiln	90
4	Removal of Preheater fan inlet damper to avoid Pressure drop and increase the preheater fan flow	-
5	Installation of Online bulk loading arrangement for OPC cement loading	25
6	Replacement of Duoflex burner with PYROJET burner from M/S KHD (Clinker production increased due to high momentum burner)	103
7	Up-gradation of Preheater & RABH fan	800
8	Up-gradation of Cooler	2100
9	UP-gradation of Kiln main drive & Kiln feed bucket Elevator	100
10	Classifier for CVRM-2	30
	Total	6974

9.10.14 The proponent has mentioned that there is no court case or violation under EIA Notification to the project or related activity.

9.10.15 Name of the Consultant: M/s. Pioneer Laboratories & Consultants Pvt. Ltd., Hyderabad (Sl. No. 113 in the List of Accredited EIA Consultants dated 10th July 2019).

Observations of the committee:

9.10.16 The project location is at a distance of 8.1 km from the boundary of ESZ of Karaivetti bird sanctuary. No abstraction of ground water is proposed. Water requirement will be met from surface water.

Recommendations of the Committee:

9.10.17 After detailed deliberations, the Committee recommended the project proposal with following specific ToRs for undertaking detailed EIA and EMP study in addition to the generic ToRs enclosed at **Annexure-1 read with additional ToRs at Annexure-2**

- i. Action plan for enhancement of green belt covering 5000 plants inside the plant and 50000 plants outside the plant shall be furnished.
- ii. No groundwater abstraction is allowed for proposed additional capacity. The existing abstraction of groundwater shall be phased out in 5 years. The action plan shall be furnished in the EIA report.
- iii. Explore the possibility of railway siding. Action plan for laying the railway siding and maximum utilization of the same for transportation shall be furnished.
- iv. Action plan for shifting of crusher to mines pit as per the progress of development shall be furnished.
- v. Action plan for Rainwater harvesting and its monitoring to the tune of 200% of annual water consumption shall be furnished.
- vi. Consolidated certified report from Regional Office for all the existing Environmental Clearances of M/s. DCBL shall be submitted.

9.11 Expansion of Integrated Cement Plant [Clinker production from 4.80 MTPA to 8.3 MTPA, Cement from 4.85 to 8.35 MTPA and installation of WHRS - 36 MW by **M/s. UltraTech Nathdwara Cement Limited located** at Village - Amla, Tehsil - Pindwara, District -Sirohi (**Rajasthan**) [Online Proposal No. IA/RJ/IND/107599/2019, File No. J-11011/59/2010-IAII(I)]– **Prescribing of Terms of Reference regarding.**

9.11.1 M/s. UltraTech Nathdwara Cement Limited is proposing expansion of Integrated Cement Plant - Clinker (4.8 to 8.3 MTPA), Cement (4.85 to 8.35 MTPA) along with installation of WHRS (36 MW) at Village: Amla, Tehsil: Pindwara, District: Sirohi (Rajasthan). It is proposed to set up the plant for manufacturing of cement/clinker based on dry process technology. The project proponent submitted an application in the prescribed format along with Form-1 and PFR to the Ministry online on 08th June, 2019 *vide* Online Application No. IA/RJ/IND/107599/2019.

9.11.2 The existing project was accorded Environmental Clearance *vide* letter no. J-11011/59/2010-IA.II(I)-I dated 01st May, 2010; amended on 14th June, 2013 in the name of M/s. Binani Cement Ltd (BCL). UltraTech has taken control of BCL by way of Scheme of arrangement approved by NCLT and BCL is now a wholly owned subsidiary of UltraTech. Subsequent thereto, the name of BCL has been changed to UltraTech Nathdwara Cement Limited. Application for transfer of the existing Environment Clearance from M/s. Binani Cement Limited to M/s. UltraTech Nathdwara Cement Limited has been uploaded online on MoEFCC web portal on 08th February, 2019. Hard copy of the original documents has been submitted on 04th April, 2019. The same is under process with MoEFCC, New Delhi. Consent to Operate was accorded by Rajasthan State Pollution Control Board *vide* Order No. 2016-2017/CPM/4669 dated 04.11.2016 for Unit-1 valid up to 30th Sep. 2019 & *vide* order No.2016-2017/ CPM/ 4670 dated 07th Nov.2016 for Unit-2 valid up to 30th Sep. 2019.

9.11.3 The expansion Unit is proposed at existing unit at Village - Amla, Tehsil - Pindwara, District -Sirohi (Rajasthan).

9.11.4 Total land acquired for the plant is 230 ha; which is industrial land and proposed expansion will be done within the existing plant premises by installation of new Line - III.No forest land is involved. The entire land has been acquired for the project. Out of

the total plant area i.e. 230ha, 86.8 ha (~38% of the total plant area) has already been developed under greenbelt/plantation and same will be maintained in future.

- 9.11.5 No National Park / Wildlife Sanctuary / Biosphere Reserve/ Tiger Reserve/ Elephant Reserve are reported to be located in the core and buffer zone of the project. The area also does not report to form corridor for Schedule -I fauna.
- 9.11.6 Total project cost is Rs. 1250 crores. Existing manpower is 1851 and additional 200 persons will be required for the proposed expansion. Total manpower after expansion during operation phase will be 2051 Persons and during construction phase approx. 2000 persons will be employed from nearby area. Preference will be given to locals as per eligibility.
- 9.11.7 The targeted production capacity of Integrated Cement Plant- Clinker (8.3 MTPA), Cement (8.35MTPA), along with installation of WHRS (36 MW). Limestone is being/will be transported via covered conveyor belt from Captive Limestone Mines at Village Amla and Thandiberi, Red Ochre / Iron Ore is being / will be sourced from Chittorgarh (Rajasthan) through road. The proposed capacity for different products is as below:

Unit	Existing Capacity	Additional Capacity	Total capacity after expansion
Clinker (MTPA)	4.8 (Line I: 2.10 & Line II: 2.7)	New Line III - 3.5	8.3
Cement (MTPA)	4.85	3.5	8.35
WHRs (MW)	-	36	36
CPP (MW)	70	Nil	70

- 9.11.8 The electricity load of 35 MW will be sourced from CPP, Proposed WHRS and RSEB Grid.
- 9.11.9 Raw materials required for the project are Limestone; which is being/will be sourced from Captive Limestone Mines at Village Amla and Thandiberi; Silica Sand is being / will be purchased from Iswal (Udaipur, Rajasthan); Red Ochre / Iron Ore is being / will be sourced from Chittorgarh (Rajasthan); Gypsum is being / will be purchased from Barmer, Bikaner, Jaisalmer; Fly ash is being / will be purchase from Barmer (Rajasthan), Gandhi nagar (Gujrat). Fuel consumption is / will be mainly Pet Coke (Indian/Imported); which is being / will be purchased from Reliance, Jamnagar, Nayara, Wadinar (Gujrat) and Imported Coal/ Lignite/ Indian Coal via Mundra &Kandla Port.
- 9.11.10 Water Consumption for the proposed expansion will be 1050 KLD; which is being/will be sourced from Ground water. RO reject water & boiler blow down water is being/will be used for dust suppression after proper neutralization. Domestic wastewater generated from plant is being/will be treated in STP and treated water is being/will be used for greenbelt development / plantation.
- 9.11.11 The proponent has mentioned that there is no court case or violation under EIA Notification to the project or related activity.

- 9.11.12 After detailed deliberations, the Committee recommended the project proposal with following specific ToRs for undertaking detailed EIA and EMP study in addition to the generic ToR enclosed **at Annexure I read with additional ToRs at Annexure-2:**
- i. Action plan for Rainwater harvesting and its monitoring to the tune of 200% of annual water consumption.
 - ii. Design Waste Heat Recovery in all kilns and furnish the details.
 - iii. Action plan to develop greenbelt in 53% of the plant area and furnish the details. Incorporate the same in layout and furnish the same in the same in the EIA report with legible map with scale.
 - iv. Design the plant with ZLD and furnish the details in the report with detailed water balance and effluent/wastewater treatment/recycling etc.
 - v. Designed the plant with air cooled condensers and furnish the details.
 - vi. Design the plant with provision for addition of alternate fuel and furnish the details.
 - vii. Public Hearing to be conducted by the concerned State Pollution Control Board.
 - viii. The issues raised during public hearing and commitment of the project proponent on the same along with time bound action plan to implement the commitment and financial allocation thereto should be clearly provided.
 - ix. The project proponent should carry out social impact assessment of the project and furnish the action plan for Corporate Environment Responsibility as per the Ministry's Office Memorandum vide F.No. 22-65/2017-IA.III dated 1/05/2018.

- 9.12 Proposed expansion of existing 0.15 MTPA Sponge Iron Plant by addition of 2.5 MTPA Beneficiation Plant and 2.0 MTPA Pellet Plant of **M/s Orissa Sponge Iron & Steel Limited** located at Palaspanga, District- Keonjhar district, Odisha.- [Online Proposal No. IA/OR/IND/111614/2019, File No. J-11011/134/2006-IAII(I)]– **Prescribing of Terms of Reference – regarding**

Consideration of the proposal was deferred as the Project Proponent did not attend the meeting. The proposal may be considered subject to satisfactory explanation of the reasons of absence by the applicant.

- 9.13 Expansion in production capacity of Integrated Cement Project - Clinker (2.2 to 7.0 MTPA), Cement (3.3 to 7.5 MTPA), CPP (30 to 60 MW), WHRS (5 to 36 MW) and D.G. Set (6 to 12 MW) by **M/s. UltraTech Cement Ltd** located at Villages: Tunkara & Balara, Tehsil: Jaitaran, District: Pali (**Rajasthan**) [Online Proposal No. IA/RJ/IND/111896/2019, File No. J-11011/569/2011-IAII(I)]– Prescribing of **Terms of Reference** regarding.

- 9.13.1 M/s. UltraTech Cement Limited proposes Expansion in production capacity of Integrated Cement Project - Clinker (2.2 to 7.0 MTPA), Cement (3.3 to 7.5 MTPA), CPP (30 to 60 MW), WHRS (5 to 36 MW) and D.G. Set (6 to 12 MW) at Villages: Tunkara & Balara, Tehsil: Jaitaran, District: Pali (Rajasthan).It is proposed to set up the plant for manufacturing of cement / clinker based on dry process technology. The project proponent submitted an application in the prescribed format along with Form-1 and other reports to the Ministry online on 20th July, 2019 *vide* Online Application No. IA/RJ/IND/111896/2019.

- 9.13.2 The Existing Project was accorded Environment Clearance vide letter No. J-11011/569/2011-IA-II (I) dated 27thFeb., 2015 for Integrated Cement Project - Clinker (2.2 MTPA), Cement (3.3 MTPA), CPP (30 MW), WHRS (5 MW) and D.G. Set (6 MW) at Villages: Tunkara & Balara, Tehsil: Jaitaran, District: Pali (Rajasthan). The company could not able to implement the existing granted capacity of Integrated Cement Plant due to un favorable market scenario; and now, installation of the project with granted capacity would not be feasible to meet the current cement demand.
- 9.13.3 The proposed unit will be located at Villages: Tunkara & Balara, Tehsil: Jaitaran, District: Pali (Rajasthan).
- 9.13.4 The land area acquired for the proposed plant is 156.10 ha; Existing Land use of the project area is private agricultural and conversion in to the industrial land is under process. No forest land is involved. The entire land has been acquired for the project. Out of the total project area, 51.52 ha (33%) will be used for greenbelt development.
- 9.13.5 No National Park / Wildlife Sanctuary / Biosphere Reserve/ Tiger Reserve/ Elephant Reserve, are reported to be located in the core and buffer zone of the project. The area also does not report to form corridor for Schedule -I fauna.
- 9.13.6 Total project cost is approx. 3600 Crores rupees. Proposed employment generation from proposed project will be 800 direct employments and 2000 indirect employments.
- 9.13.7 The targeted production capacity of Integrated Cement Project: Clinker (7.0 MTPA), Cement (7.5 MTPA), CPP (60 MW), WHRS (36 MW) and D.G. Set (12 MW). The Limestone for the plant would be sourced from Captive Mine by covered conveyor belt; Laterite/Iron Ore / Red Ochre will be sourced from Chittorgarh & Bhilwara District of Rajasthan by road; Gypsum from Nagaur & Bikaner (Rajasthan) by road.
- 9.13.8 The existing and proposed capacity for different products for new site area is as below:

Particular	Unit	Existing Capacity (as per EC dated 27 th Feb., 2015)	Additional Proposed Capacity		Total Capacity
			Line -1	Line- 2	
Clinker	MTPA	2.2	1.3	3.5	7.0 (3.5 x 2)
Cement	MTPA	3.3	0.45	3.75	7.5 (3.75 x 2)
CPP	MW	30	Nil	30	60 (30 x 2)
WHRS	MW	5	13	18	36 (18 x 2)
D.G. Set	MW	6	Nil	6	12 (6 x 2)

- 9.13.9 The electricity load of 85 MW will be sourced from proposed Captive Power Plant, WHRS & Grid (JVNL). Company has also proposed to install 12 MW of DG Set.

- 9.13.10 Proposed Raw materials required for the project are Limestone; which will be sourced from Captive Mine. Laterite/Iron Ore / Red Ochre will be sourced from Chittorgarh & Bhilwara District of Rajasthan; Gypsum from Nagaur & Bikaner (Rajasthan); fly ash will be sourced from Captive Power Plant (CPP) & Govt. Thermal Power Plant at Kota & Suratgarh in Rajasthan. Fuel for Cement Plant will be Indian & Imported Coal and Indian & Imported Petcock, sourced from South Africa, Indonesia, SECL, IOCL refinery at Panipat, Reliance refinery at Jamnagar and Nearby Market. HSD for D.G Set will be sourced from Nearby Market.
- 9.13.11 Water Consumption for the proposed project will be 3800 KLD; which will be sourced from *Ground Water & Mine Sump Water* and no waste water will be discharged from the cement plant. Domestic wastewater treated in STP and the treated water will be utilized for greenbelt development/ plantation. Waste water generated from CPP will be used for dust suppression after proper neutralization.
- 9.13.12 The proponent has mentioned that there is no court case or violation under EIA Notification to the project or related activity.

Observations of the Committee:

- 9.13.13 The Committee noted that the project site is located at Pali District, Rajasthan. As per the Order dated 10/07/2019 passed by the Hon'ble National Green Tribunal in Original Application No. 1038/2018, no further industrial activities or expansion shall be allowed with regard to 'red' and 'orange' category units in Pali, Rajasthan till the said areas are brought within the prescribed parameters or till carrying capacity of area is assessed and new units or expansion is found viable having regard to the carrying capacity of the area and environmental norms.

Recommendations of the Committee:

- 9.13.14 In view of the aforesaid, the Committee deferred the consideration of the project and asked the project proponent to obtain confirmation from CPCB regarding location of the plant site with respect to CEPI area.

31st July 2019

- 9.14 Establishment of 1x 350 TPD DRI Kiln to manufacture 1,05,000 TPA of Sponge Iron, 4X 15 T Induction Furnaces to manufacture 1,80,000 TPA of MS Billets, 10x500 TPD of Rolling Mill to manufacture 1,75,000 TPA of Structural Steel / Rolled product, 10 MW of WHRB based Power Plant, 10 MW FBC based Power Plant & 1 x9 MVA Submerged Electric ARC Furnace to Manufacture SiMn-14,400 TPA OR FeMn -14,400 TPA or FeSi-7,000 TPA by Forward Integration in the existing 10 MW Biomass based power plant in the existing plant premises by **M/s. Animesh Ispat Private Limited** located at Village Khajuri, Tehsil & District Baloda Bazaar, **Chhattisgarh**-[Online Proposal No. **IA/CG/IND/107824/2017**, File No. J-11011/420/2017-IAII(I)]– **Environment Clearance regarding.**
- 9.14.1 M/s. Animesh Ispat Private Limited has made an online application vide proposal no. IA/CG/IND/107824/2017 dated 22/07/2019 along with copies of EIA/EMP report and Form – 2 seeking Environmental Clearance (EC) under the provisions of the EIA Notification, 2006 for the project mentioned above. The proposed project activity is listed at Sl. No. 3(a) Metallurgical Industries (Ferrous and Non-ferrous) under Category “A” EIA Notification, 2006 and the project is appraised at the Central level.

Details submitted by the project proponent

- 9.14.2 The proposed expansion of Steel Plant of M/s. Animesh Ispat Private Limited located at Village: Khajuri, Tehsil: Baloda Bazaar, District: Baloda Bazaar, Chhattisgarh was initially received in the Ministry on 21/08/2017 for obtaining Terms of Reference (ToR) as per EIA Notification, 2006. The project was appraised in 22nd EAC (Industry – 1) meeting held during 11-13th September 2017 for prescribing ToR to the expansion project for undertaking detailed EIA study for obtaining Environmental Clearance. Accordingly, the Ministry of Environment, Forest and Climate Change had prescribed ToR to the project on vide Lr. No. J-11011/420/2017-IA II (I) dated 19/09/2017.
- 9.14.3 The project of M/s. Animesh Ispat Pvt. Limited is an existing 10.0 MW Biomass based power plant located at Village: Khajuri, Tehsil: Baloda Bazaar, District: Baloda Bazaar, Chhattisgarh. It has been proposed to establish 1 x 350 TPD DRI Kiln to manufacture 1,05,000 TPA of Sponge Iron, 4 x 15 T Induction Furnaces to manufacture 1,80,000 TPA of MS Billets, 1 x 500 TPD of Rolling Mill to manufacture 1,75,000 TPA of Structural Steel / Rolled product, 10 MW of WHRB based Power Plant, 10 MW FBC based Power Plant & 1 x 9 MVA Submerged Electric Arc Furnace to manufacture Si-Mn – 14,400 TPA OR Fe-Mn – 14,400 TPA OR Fe-Si – 7,000 TPA by forward Integration in the existing 10 MW Biomass based power plant in the existing plant premises. Existing plant is located in 9.949 Ha. (24.6 acres) of land and proposed expansion will be taken up in the existing plant premises only.
- 9.14.4 It has been reported that the existing plant does not have EC, as the plant was established in June 2006 (as per EIA Notification 1994 EC required for capital investment more than Rs 100 Crores, for Greenfield projects). Accordingly obtained Consent to Establishment vide letter no. 2956/TS/CECB/2006 dated 16/06/2006 from Chhattisgarh Environment Conservation Board (CECB). Hence, Certified Compliance report of Consent to Operate

issued for existing plant from the Regional Office, CECB, Raipur, Chhattisgarh has been submitted. There are no non-compliances reported by Regional officer, CECB, Raipur.

9.14.5 The following are the existing and proposed plant configuration and production capacity of various units:

S.No	Unit	Existing Capacity	Proposed Expansion	After Expansion
1.	DRI Kilns	---	1 x 350 TPD (1,05,000 TPA)	1 x 350 TPD (1,05,000 TPA)
2.	Induction Furnaces	---	4 x 15 T (1,80,000 TPA)	4 x 15 T (1,80,000 TPA)
3.	Rolling Mill	---	1 x 500 TPD (1,75,000 TPA)	1 x 500 TPD (1,75,000 TPA)
4.	Power Plant WHRB	---	10 MW	10 MW
5.	Power Plant FBC	---	10 MW	10 MW
6.	Ferro Alloys Plant (1 x 9 MVA)	---	Silicon Manganese (SiMn) – 14,400 TPA OR Ferro Manganese (FeMn) – 14,400 TPA OR Ferro Silicon (FeSi) – 7,000 TPA	Silicon Manganese (SiMn) – 14,400 TPA OR Ferro Manganese (FeMn) – 14,400 TPA OR Ferro Silicon (FeSi) – 7,000 TPA
7.	Biomass based Power Plant	10 MW	---	10 MW

9.14.6 Existing plant is located in 9.949 Ha. (24.6 acres) of land, comprising of 574, 575, 577, 578, 579, 580, 581, 582, 583 & 588/2 and same is in possession of management. Proposed expansion will be taken up in the existing plant premises only. No River / stream passes through the plant area. It has been reported that no natural water body / stream exists in the plant area and any modification / diversion in the existing natural drainage pattern at any stage has not been proposed.

9.14.7 The topography of the area is flat with undulations and reported that the site lies between 21°44'49.34"N to 21°45'2.50"N Latitude and 82°10'35.71"E to 82°10'41.75"E longitude in Survey of India Topo sheet no. 64 K/1 at an elevation of 261m AMSL. The ground water table reported to ranges between 2.0 to 9.1 m bgl below the land surface during the post-monsoon season and 18.5 to 4.0 m bgl below the land surface during the pre-monsoon season.

9.14.8 There are no National Park/ Wild life sanctuary / Biosphere reserve / Tiger Reserve/ Elephant Corridors / migratory routes for Birds with in 10 Km. radius of the plant. Sonbarsa Reserve Forest is present at 3.1 Kms. from the plant site. There are no

Schedule- I fauna exists in the study area. The list of flora and fauna during study period in the study area is furnished the EIA report.

9.14.9 The list of raw material for the proposed expansion project is given below:

S.No.	Raw Material		Quantity (in TPA)	Sources	DISTANCE (w.r.t Plant)	Mode of Transport
1.	For DRI Kilns (Sponge Iron) - 1,05,000 TPA					
a)	Pellets/		1,52,250	Pellet manufacturers Barbil, Orissa	~ 80 Kms.	By Road
	Iron Ore		1,68,000	NMDC, Chhattisgarh	~ 500 Kms.	By rail & road (through covered trucks)
b)	Coal	Indian	1,36,500	SECL, Chhattisgarh / MCL Odisha	~ 500 Kms.	By rail & road (through covered trucks)
		Imported	94,500	Indonesia / South Africa / Australia	600 Kms. (from Vizag Port)	Through sea route, rail route & by road
c)	Dolomite		5,250	Raipur	~ 80 Kms.	By road (through covered trucks)
2.	For Induction Furnace (MS Billets) - 1,80,000 TPA					
a)	Sponge Iron		1,50,000	Own generation & Purchased from Raipur	--- ~ 80 Kms.	---- By Road (through covered trucks)
b)	Scrap		64,000	Raipur	~ 80 Kms.	By road (through covered trucks)
c)	Ferro Alloys		2700	Raipur	~ 80 Kms.	By road (through covered trucks)
3.	For Rolling Mill (TMT bars & Structural Steel) – 1,75,000 TPA					
a)	Steel billets		1,90,000	Own generation & Purchased from Raipur	--- ~ 80 Kms.	---- By road (through covered trucks)
b)	Furnace oil		8,750	Nearby HPCL / IOCL depots	~ 80 Kms.	Tankers
c)	Coal for Gasifier (Producer	Indian	35,000	SECL, Chhattisgarh / MCL Odisha	~ 500 Kms.	By rail & road (through covered trucks)

S.No.	Raw Material		Quantity (in TPA)	Sources	DISTANCE (w.r.t Plant)	Mode of Transport
	Gas – 10500 Nm ³ /hr)	Imported	22,400	Indonesia / South Africa / Australia	600 Kms. (from Vizag Port)	Through sea route, rail route & by road
4.	For FBC Boiler [Power Generation 10 MW]					
a)	Indian Coal (100 %)		54,000	SECL, Chhattisgarh / MCL Odisha	~ 500 Km.	By rail & road (through covered trucks)
OR						
b)	Imported Coal (100%)		34560	Indonesia / South Africa / Australia	600 Km (from Vizag Port)	Through sea route / rail route / by road
OR						
c)	Dolochar + Indian Coal	Dolochar	31,500	In plant generation	---	through covered conveyors
		Indian Coal	38,250	SECL, Chhattisgarh / MCL Odisha	~ 500 Km	By rail & road (through covered trucks)
OR						
d)	Dolochar + Imported Coal	Dolochar	31,500	In plant generation	---	through covered conveyors
		Imported	18,810	Indonesia / South Africa / Australia	600 Km. (from Vizg Port)	Through sea route / rail route / by road
5.	For Ferro Alloys (1 x 9 MVA)					
5 (i)	<i>For Ferro Silicon – 7000 TPA</i>					
a)	Quartz		8,450	Chhattisgarh	~ 100 Km	By Road (Covered trucks)
b)	LAM coke		2,800	Chhattisgarh / Jharkhand	100 – 500 Km	By Rail & Road (covered trucks)
c)	MS Scrap		175	Raipur	~ 80 Km	By Road (covered trucks)
d)	Electrode paste		420	Maharashtra / West Bengal	600 – 900 Km	By Road (covered trucks)
5 (ii)	<i>For Ferro Manganese – 14400 TPA</i>					
a)	Manganese Ore		26,650	MOIL / OMC	500 – 600 Km	By Rail & Road (covered trucks)
b)	LAM coke		15,350	Chhattisgarh / Jharkhand	100 – 500 Km	By Rail & Road (covered trucks)
c)	MS Scrap		1030	Raipur	~ 80 Km	By Road (covered trucks)

S.No.	Raw Material	Quantity (in TPA)	Sources	DISTANCE (w.r.t Plant)	Mode of Transport
d)	Electrode Paste	3000	Maharashtra / West Bengal	600 – 900 Km	By Road (covered trucks)
5 (iii)	<i>For Silico Manganese – 14400 TPA</i>				
a)	Manganese Ore	15,850	MOIL / OMC	500 – 600 Km	By Rail & Road (covered trucks)
b)	Mn. Slag	9,000	In house generation	---	----
c)	Quartz	3,900	Chhattisgarh	~ 100 Km	By Rail & Road (covered trucks)
d)	LAM coke	1,600	Chhattisgarh / Jharkhand	100 – 500 Km	By Rail & Road (covered trucks)

9.14.10 The targeted production capacity of the plant after expansion project is Structural Steel / Rolled product – 0.175 million TPA. Iron ore & Iron ore pellet will be supplied by M/s. Basna Steels Pvt. Ltd. Imported Coal would be supplied by M/s. Mukund Coal Fields Pvt. Ltd. Major raw materials will be transported through railway rakes up to the nearest railway station (Nipaniya RS – 19.5 Kms.) and then to the site through road by covered trucks.

9.14.11 Impact on Vehicular Traffic Load due to proposed expansion

Traffic load during the operation of the existing plant (Baseline) :5550 PCU/day

Additional Traffic load during operation of the expansion project :1146 PCU/day

Total Traffic load during operation of existing and proposed expansion load

:6696 PCU/day

Traffic Capacity as per the IRC 73: 1980 for Highways

:10000 PCU/day

9.14.12 Water requirement for the present proposal will be 640 KLD. Total water requirement after the proposed expansion will be 1840 KLD, which will be sourced from Kesla Anicut. Water Resource Department, Kasdol vide letter no. 2372/Revenue/2018/Kasdol dated 27/06/2018 has confirmed the availability of water in Kesla anicut.

9.14.13 Total power required for the existing unit & for the proposed expansion units will be 30 MW which will be partly met from the existing 10 MW biomass based power, 10 MW WHRB power and 10 MW FBC power plant.

9.14.14 Baseline Environmental Studies were conducted during summer season i.e. from 1st October 2017 to 31st December 2017. Ambient air quality monitoring has been carried out at 8 locations and the data submitted indicated: PM_{2.5} (19.2 to 35.2 µg/m³), PM₁₀ (33.6 to 58.2 µg/m³), SO₂ (7.6 to 12.3 µg/m³), NO_x (7.4 to 13.8 µg/m³) & CO (350 to 650 µg/m³). The results of the modeling study indicates that the maximum increase of GLC due to the proposed units & Vehicular emissions will be 4.2 µg/m³ with respect to the PM₁₀, 13.2 µg/m³ with respect to the SO₂, 16.2 µg/m³ with respect to the NO_x & 3.8 µg/m³ with respect to the CO.

- 9.14.15 Ground water quality has been monitored in 8 locations in the study area are analysed and the data submitted indicated pH: 7.1 to 7.6, Total Hardness: 145 to 255 mg/l, Chlorides: 132 to 225 mg/l, Fluoride: 0.31 to 0.49 mg/l. Heavy metals are within the limits.
- 9.14.16 Surface water samples were analysed from 3 locations in the study area and analysed and the data submitted indicated pH: 7.2 to 7.7, DO: 4.1 to 6.2 mg/l, BOD: 1.5 to 2.9 mg/l & COD: 3.5 to 6.2 mg/l.
- 9.14.17 Noise levels are in the range of 40.9 dBA to 67.6 dBA during the study period. It has been reported that there is no R & R involved, as it is an expansion project.
- 9.14.18 It has been reported that the following Solid wastes will be generated due to the proposed expansion project which will be stored in storage yard above the ground level.

S.No.	Waste / By product	Quantity (TPD)		Method of disposal
		Existing	Proposed	
1	Ash from DRI	---	63.0	Will be given to Cement plants (M/s. Century Cement - Baikunth) & Brick manufacturers.
2	Dolochar	---	105.0	Will be reused in FBC boiler-based power plant
3	Kiln Accretion Slag	---	4.0	Will be given to M/s. Agarwal Infrabuild Private Limited for road construction in their ongoing projects.
4	Wet Scraper Sludge	---	16.0	Will be given to M/s. Agarwal Infrabuild Private Limited for road construction in their ongoing projects.
5	SMS Slag	---	60.0	Will be crushed and iron will be recovered & remaining non -magnetic material being inert by nature will be given to M/s. Agarwal Infrabuild Private Limited for road construction in their ongoing projects
6	Mill scales from Rolling Mill	---	30.0	Mill scales from Rolling Mill will be reused in the SMS
7	Slag from SiMn	---	37.5	will be utilized in road construction
8	Slag from FeMn	---	30.0	will be used in manufacture of Silico manganese as it contains high MnO ₂
9	Slag from	---	0.8	will be given to cast iron foundries

S.No.	Waste / By product	Quantity (TPD)		Method of disposal
	FeSi			
10	Ash from Power Plant (with Indian Coal)	70.0	84.0	In the existing plant, ash is being given to nearby Brick manufacturers and during operation of the present proposal ash will be given to Cement plant (M/s. Century Cement - Baikunth) & will be given to the brick manufacturers.
11	Tar (from Producer gas plant)	---	2.1	Will be given to coal tar recyclers / agencies engaged in construction activities / given to nearby Pellet plant units /
12	Cinder (from Producer gas plant)	---	45	Will be given to Cement plant

- 9.14.19 It has been reported that an area of 8.2 Acres (3.319 Ha.) has been earmarked for Greenbelt to attenuate the noise levels and trap the dust generated due to the project development activities.
- 9.14.20 It has been reported that the Consent to Operate for existing plant was accorded by Chhattisgarh Environment Conservation Board (CECB) vide letter no. 6805 and 6807/TS/CECB/2018 Naya Raipur dated 01/03/2018 and same is valid till 31/12/2019.
- 9.14.21 The Public hearing for the proposed project was held on 4th January 2019, at 11:00 A.M at Ground of High School, Village Khajuri, Tehsil Balodabazar, District Balodabazar-Bhatapara, Chhattisgarh under the chairmanship of Additional Collector (ADM cadre). The issues raised during public hearing are Pollution, Socio economic activities & employment etc., which have been addressed in the EIA report.
- 9.14.22 An amount of Rs.1.45 Crores out of project cost of Rs 160 Crores (as per Ministry's Office Memorandum vide F.No. 22-65/2017-IA.III dated 1st May 2018) has been earmarked for Corporate Environment Responsibility (CER) based on need based assessment and public hearing issues. The details of CER proposed are as follows:

S.No	Major Activity Heads	Years (Rs. In Crores)			Total Expenditure (Rs. In Crores)
		1 st	2 nd	3 rd	
A	Based on Need Based & SIA Study				
1	Community & Infrastructure Development Programmes (construction of 6 nos. of toilets in	0.09	0.09	0.22	0.40

S.No	Major Activity Heads	Years (Rs. In Crores)			Total Expenditure (Rs. In Crores)
		1 st	2 nd	3 rd	
	nearby local schools in Khajuri, Boirdih, Dhabadih village under Swachh Bharat (6nos@ Rs 3 lakhs / toilet), renovation of school buildings (Rs 10 lakhs) , Providing LED Street lighting with solar panels in suitable places in surrounding 3 nos. of villages, (Rs 12 lakhs)				
2	Establishment of Skill Development Centre “DISHA Centre” along with necessary infrastructure for various vocational training program for employment generation in association with <i>National Skill Development Mission</i> (Automobile Repair, Welding, Electrical, Computer Hardware, Soft skills like computer programs, Industrial Sewing Operator & Coaching classes for under privilege students for various competitive exams, Defence Services etc.)	0.15	0.10	0.10	0.35
3	Education and Scholarship Programmes <ul style="list-style-type: none"> • Providing furniture, computers, library, sports equipment etc. for 3 nos. of schools in Khajuri, Boirdih, Dhabadih village • Sponsorship for School Sport events • Providing Model Anganwadi Centres in consultations with State Women and Child Development Department 	0.10	0.05	0.05	0.20
4	Medical & health related activities (like Ambulance facilities to villagers etc.)	0.10	---	---	0.10
5	RWH pits in the surrounding villages	0.05	0.05	0.05	0.15
6	Supply of NPK based fertiliser to farmers	0.05	0.05	---	0.10
	<i>SUBTOTAL (A)</i>	0.54	0.34	0.42	1.30

S.No	Major Activity Heads	Years (Rs. In Crores)			Total Expenditure (Rs. In Crores)
		1 st	2 nd	3 rd	
B	Based on Public Consultation / Hearing				
1	Water Sprinkling on roads outside the plant premises	0.05	0.05	0.05	0.15
	<i>SUBTOTAL (B)</i>	0.05	0.05	0.05	0.15
	TOTAL (A + B)	0.59	0.39	0.47	1.45

9.14.23 The capital cost of the project is Rs.160 Crores and the capital cost for environmental protection measures is proposed as Rs. 14.0 Crores. The annual recurring cost towards the environmental protection measures is proposed as Rs. 1.9 Crores/annum. The employment generation is 200 people during operation of the proposed expansion and 500 people during construction of the proposed units.

9.14.24 The details of capital cost for environmental protection measures and annual recurring cost towards the environmental protection measures is as follows:

S.No	Particulars	Capital Cost (Rs.in Crores)	Recurring Cost / Annum (Rs.in Crores)
1.	Air Emission Management		
	• Electro Static Precipitators (ESP)	3.5	1.00
	• Fume Extraction system with bag filters	2.0	
	• Stacks	2.0	
	• Water Sprinklers	0.2	
2.	Wastewater Management		
	• for ETP & STP	0.3	0.20
	• for Garland drains	0.2	
3.	Solid waste Management		
	• Fly Ash Handling system	1.2	0.30
	• Slag Handling	0.3	
	• Hazardous waste storage & disposal	0.2	
	• Municipal solid waste storage & disposal	0.1	
4.	Greenbelt development, Land scaping, Noise Management, RWH etc.	0.1	0.10
5.	Fire Safety Systems	1.0	0.05
6.	Environmental Monitoring		
	• AAQMS	1.6	0.10
	• CEMS	0.5	
7.	Occupational Health & Safety		

S.No	Particulars	Capital Cost (Rs.in Crores)	Recurring Cost / Annum (Rs.in Crores)
	• Primary Health Centre (PHC)	0.5	0.15
	• Personal Protective Equipment's (PPEs)	0.2	
	• Ambulance	0.1	
TOTAL		14.0	1.90

- 9.14.25 8.2 acres (3.319 Ha.) of land is earmarked for greenbelt development in the plant premises (including existing). 10 to 20 m wide greenbelt will be developed all around the plant.
- 9.14.26 The proponent has mentioned that there is no court case or violation under EIA Notification to the project or related activity.
- 9.14.27 Name of the Consultant: M/s. Pioneer Laboratories & Consultants Pvt. Ltd., Hyderabad (Sl. No. 113 in the List of Accredited EIA Consultants dated 10th July 2019).

Observations of the Committee

- 9.14.28 The Committee noted that as per the proceedings of the public hearing only four people have attended the hearing and only one person namely Shri. Vishay Kumar Dhruv, Husband of the Sarpanch, Khajuri village has expressed concerns against the proposed expansion project. Further, the Committee has also seen the videography of the public hearing wherein it is noted that majority of the people were raising slogans against the expansion project outside the venue fixed for the hearing and they have not come forward to participate in the hearing.

Recommendations of the Committee:

- 9.14.29 In view of the above and after detailed deliberations, the committee requested the Ministry to obtain the comments/views from the District Magistrate on the proceedings of the Public Hearing for further consideration and taking appropriate view on the proposal cited above.
- 9.15 Proposed change of product from 3.6MVA SAF (from 10500TPA C.I. Lumps/Balls to 9200 TPA Ferro Alloys) Proposed 5.4MVA Submerged Arc Furnace for production of 13,800 TPA Ferro Alloys, Proposed Rolling Mill - 18000 TPA for MS Strip/Round Bar/Square with Coal Gasifier 1750 Nm³/Hr, Proposed 1x750 KW + 1x2250 KW Induction Furnace for 8400 TPA for Casting & Forging of Iron & Steel, Proposed 1x550 KW+1x750 KW+1x2250 KW Induction Furnace for 12000 TPA for Casting & Forging of Iron & Steel and Steel Billets/ Ingots and Proposed Iron Ore Washing of 50000 TPA capacity by **M/s. Earthstahl & Alloys Private Limited** located at Village Duldula, Tehsil Simga, District Baloda Bazaar, Chhattisgarh - [Online Proposal No. **IA/CG/IND/107108/2016**, File No. J-11011/202/2016IAII(I)]- **Environment Clearance Regarding.**

9.15.1 M/s. Earthstahl & Alloys Private Limited has made an online application vide proposal no. IA/CG/IND/107108/2016 dated 10/07/2019 along with copies of EIA/EMP report and Form – 2 seeking Environmental Clearance (EC) under the provisions of the EIA Notification, 2006 for the project mentioned above. The proposed project activity is listed at Sl. No. 3(a) Metallurgical Industries (Ferrous and Non-ferrous) under Category “A” EIA Notification, 2006 and the project is appraised at the Central level.

Details submitted by the project proponent

9.15.2 The project of M/s Earthstahl & Alloys Pvt. Limited located at Duldula Village, Simga Tehsil, District Baloda Bazaar, Chhattisgarh State involves the following:

- i. Change of product from existing 1X3.6MVA SAF (10500TPA CI lumps/Ball) To 9200TPA Ferro Alloys.
- ii. Existing Induction Furnace 1x550 KW of 3600 TPA for Casting & Forging of Iron & Steel. (No Change)
- iii. Proposed Induction Furnace 1x750 KW + 1x2250KW to produce 8400 TPA for Casting & Forging of Iron & Steel.
- iv. Proposed Submerged Arc Furnace 1x5.4MVA to produce 13,800 TPA of Ferro Alloys
- v. Proposed Induction Furnace of 1x550 KW + 1x750 KW + 1x2250KW to produce 12000 TPA for Casting & Forging/Billets /Ingots of Iron & Steel.
- vi. Proposed Rolling Mill to produce 18000 TPA for MS Strip/Round Bar/Square with Coal Gasifier 1750Nm³/Hr.
- vii. Proposed Iron Ore Washing Plant of Capacity 500000 TPA.

9.15.3 The details of the existing and proposed unit configuration along with its production capacities is furnished as below:

S. N	Name of Unit	Capacity of unit	Existing Product	Production in TPA	Status	Proposed Change in Product Mix / new Product	Proposed New Capacity (TPA)
1.	Submerged Arc Furnace	3.6MVA	CI lumps/Balls	10500	Existing under operation	Ferro Alloys	9200
2.	Induction Furnace (No Change)	1x550K W	Castings and forging of iron & steel	3600	Existing under operation	Castings and forging of iron & steel	3600
3.	Induction Furnace	1x750K W 1x2250K W	-	-	CTE issued by CECB. (Proposed Project)	Castings and forging of iron & steel	8400
4.	Ferro Alloys Plant	1X5.4 MVA	-	-	Proposed	Ferro Alloys	13800

S. N	Name of Unit	Capacity of unit	Existing Product	Production in TPA	Status	Proposed Change in Product Mix / new Product	Proposed New Capacity (TPA)
	(Sub-merged Arc Furnace)						
5.	Induction Furnace	1x550KW	-	-	Proposed	Castings & forgings of Iron & steel/Ingots/Billets	12000
	Induction Furnace	1x750KW	-	-			
	Induction Furnace	1x2250KW	-	-			
6.	Rolling Mill	-	-	-	Proposed	MS Strip/Round/Square/ Bar	18000
7.	Coal Gasifier	1x1750N m ³ /hr	-	-	Proposed	Producer Gas	1x1750N m ³ /hr
8.	Iron Ore washing Plant	-	-	-	Proposed	Washed iron Ore	500000

Observations of the Committee

9.15.4 The committee noted that out of 31 (thirty one) acres of the land requirement, project proponent has acquired only 13 (thirteen) acres of land. The configuration of the induction furnace has not been mentioned correctly. Further, compliance to the Consent To Operate (CTO) conditions from Regional Office of CECB and compliance to the conditions stipulated in the ground water drawl permission from the Competent Authority has not been furnished. The engineering lay out of the proposed project has also not been furnished.

9.15.5 The committee noted that EIA report submitted by M/s. Pollution and Ecology Control Services, Nagpur are not up to the mark. Earlier also, EAC has raised concern on the quality of report. EAC, therefore, advised MoEF&CC to refer the matter to QCI/NABET, in case of no improvement from the consultant.

Recommendations of the Committee

9.15.6 In view of the above and after detailed deliberations, the Committee recommended to **return the proposal in present form.**

9.16 Proposed expansion of Integrated Steel Plant for ultimate production of 1.8 MTPA pellets, 0.85 MTPA Sinter, 0.3 MTPA Coke, 36000 Nm³/hour producer gas, 0.89 MTPA sponge iron, 0.6 MTPA hot metal / pig iron, 1.51 MTPA billets, 1.0 MTPA long steel products, 0.1 MTPA DI pipe, 1.2 MTPA cement grinding unit, 0.1 MTPA Ferro Alloys and 136 MW captive power plant by **M/s. Shyam Sel and Power Limited** located at Village Dhasna, Jamuria, P.O. Bahadurpur, District Paschim Burdwan, West Bengal-[Online Proposal No.

IA/WB/IND/6700/2008, File No. J-11011/887/2007-IAII(I)]– Environment Clearance Regarding.

9.16.1 M/s. Shyam Sel and Power Limited has made an online application vide proposal no. IA/WB/IND/6700/2008 dated 20/07/2019 along with copies of EIA/EMP report and Form – 2 seeking Environmental Clearance (EC) under the provisions of the EIA Notification, 2006 for the project mentioned above. The proposed project activity is listed at Sl. No. 3(a) Metallurgical Industries (Ferrous and Non-ferrous) under Category “A” EIA Notification, 2006 and the project is appraised at the Central level.

Details submitted by the project proponent

9.16.2 M/s. Shyam Sel and Power Limited has proposed for expansion of Integrated Steel Plant for ultimate production of 1.8 MTPA Pellets, 0.85 MTPA Sinter, 0.3 MTPA Coke, 36000 Nm³/hour Producer Gas, 0.89 MTPA Sponge Iron, 0.6 MTPA Hot Metal/Pig Iron, 1.51 MTPA Billets, 1.0 MTPA Long Steel Products, 0.1 MTPA DI Pipe, 1.2 MTPA Cement Grinding Unit, 136 MW Captive Power Plant & 0.1 MTPA Ferro Alloys at Village Dhasna, Jamuria, P.O. Bahadurpur, District Paschim Burdwan, West Bengal was accorded Standard ToRs by the Ministry on 1st November, 2018 vide letter No. J-11011/887/2007-IA.II (I). Based on the ToRs prescribed to the project, the project proponent submitted an application for environmental clearance to the Ministry online on 20th July 2019 vide Online proposal No IA/WB/IND/6700/2008.

9.16.3 The project of **M/s Shyam Sel & Power Limited** is located in Village Dhasna, Jamuria, P.O. Bahadurpur, District Paschim Burdwan, West Bengal State. The proposal is for expansion of Integrated Steel Plant for ultimate production of 1.8 MTPA Pellets, 0.85 MTPA Sinter, 0.3 MTPA Coke, 36000 Nm³/hour Producer Gas, 0.89 MTPA Sponge Iron, 0.6 MTPA Hot Metal/Pig Iron, 1.51 MTPA Billets, 1.0 MTPA Long Steel Products, 0.1 MTPA DI Pipe, 1.2 MTPA Cement Grinding Unit, 136 MW Captive Power Plant & 0.1 MTPA Ferro Alloys.

9.16.4 The existing and proposed capacity for different units and products are as below:

Sl. No	Name of Product	Name of Unit	Capacity of Existing Unit	Capacity of Proposed Expansion Unit	Ultimate Capacity of Product
1	Sinter	Sinter Plant	-	0.85 MTPA	0.85 MTPA (850000 TPA)
2	Iron Ore Pellets	Pellet Plant 1	0.48 MTPA	Capacity increase to 0.6 MTPA	1.8 MTPA (1800000 TPA)
		Pellet Plant 2	0.12 MTPA	Capacity increase to 0.6 MTPA	
		Pellet Plant 3	-	0.6 MTPA	
3	Hot Metal / Pig Iron	Blast Furnace	-	0.6 MTPA (1x450 m ³)	0.6 MTPA (600000 TPA)
4	Sponge Iron	Direct Reduced Iron (DRI) Plant	2 x 100 TPD 3 x 300 TPD 2 x 90 TPD (0.4248 MTPA)	4 x 350 TPD (0.462 MTPA)	0.89 MTPA (890000 TPA)

Sl. No	Name of Product	Name of Unit	Capacity of Existing Unit	Capacity of Proposed Expansion Unit	Ultimate Capacity of Product
5	Ferro Alloys	Ferro Alloy Plant	3 x 9 MVA 2 x 4.5 MVA (0.1 MTPA)	-	0.1 MTPA (100000 TPA)
6	Steel Billets/ Ingots	Steel Melting Shop (SMS) (Induction Furnace route)	7x18 T 2x15 T 4x5 T (0.6066 MTPA)	5 x 18 T 8 x 8 T (0.5082 MTPA)	1.11 MTPA (1110000 TPA)
		SMS (Electric Arc Furnace route)	-	1 x 45 T (0.4 MTPA)	0.4 MTPA (400000 TPA)
		Total Steel Billets / Ingots from SMS			
7	Rolled Products & Structural (angle, channel, Joist, etc)	Rolling Mill – 1 Structurals	48,000 TPA	Capacity increase to 0.15 MTPA	1 MTPA (1000000 TPA)
		Rolling Mill – 2 TMT Bars	55,008 TPA	Capacity increase to 0.15 MTPA	
		Rolling Mill – 3 Wire Rods	19,6992 TPA	Capacity increase to 0.2 MTPA	
		Rolling Mill – 4 Long Product	-	0.3 MTPA	
		Rolling Mill – 5 Long Product	-	0.2 MTPA	
8	Coke	Coke Oven Plant	-	0.3 MTPA	0.3 MTPA (300000 TPA)
9	Ductile Iron Pipe	DI Pipe Plant	-	0.1 MTPA	0.1 MTPA (100000 TPA)
10	Electricity	Captive Power Plant	91 MW (WHRB - 48 MW CFBC - 43 MW)	45 MW (WHRB)	136 MW (93 MW-WHRB 43 MW-CFBC)
11	Cement	Cement Grinding Unit	-	1.2 MTPA	1.2 MTPA (1200000 TPA)
12	Producer Gas	Producer Gas Plant	-	36,000 Nm ³ /Hour	36000 Nm ³ /Hour

9.16.5 The Status of compliance of earlier EC was obtained from Regional Office Bhubaneswar vide Lr. No.102-222/EPE dated 11/12/2018 and 14/01/2019 wherein it is mentioned that dust pollution is prevailing in the plant site and control measures needs to be adopted for dust control.

9.16.6 No additional land is required for the expansion units. All new units shall be accommodated within available 262.64 Hectares land (649 acres) within the existing plant boundary. Land is already in possession of the Company. The river Ajay and Damodar passes at a distance of 7 km and 11 km respectively, from the project site.

Modification / diversion in the existing natural drainage pattern at any stage have not been proposed.

- 9.16.7 The topography of the area is flat and reported to lie between Latitude: 23°40'38.51"N to 23°41'49.87"N and Longitude: 87°06'57.27"E to 87°07'35.84"E and at an elevation of 106.68 m AMSL. The total thickness of the aquifer in the study area varies from 2.1 to 16.5 m.
- 9.16.8 No national park/wildlife sanctuary/biosphere reserve/tiger reserve/elephant reserve etc. are reported to be located in the core and buffer zone of the project. The area also does not report to form corridor for Schedule-I fauna.
- 9.16.9 The raw material requirement, source and mode of transportation is given as below:

Sl. No.	UNITS	RAW MATERIAL	ANNUAL REQUIREMENT (IN TPA)	SOURCES	MODE OF TRANSPORTATION	
					Rail	Road
1.	Coke Oven Plant	Coking Coal	420000	Imported	315000	105000
2.	Sinter Plant	Iron Ore Fines	751658	Barbil-Joda, Orissa	601326	185332
		Limestone	17989	From Birmiritrapur, Orissa / Bilaspur, Raipur CG / Katni MP	-	17989
		Quicklime	42481	Local Market	-	42481
		Dolomite	75166	From Birmiritrapur, Orissa / Bilaspur, CG	75166	-
		Coke Breeze	60133	In House – Conveyor	-	-
3.	Blast Furnace	Iron Ore Lumps	128520	Barbil-Joda, Orissa	128520	-
		Coke	211680	Imported	169344	42336
		PCI Coal	65520	Imported	52416	13104
		Lime stone	52500	From Birmiritrapur, Orissa / Bilaspur, Raipur CG / Katni MP	-	52500
		Dolomite	48300	From Birmiritrapur, Orissa / Bilaspur, CG	38640	9660
		Quartzite	5250	From Belpahar Orissa // Bilaspur, Raipur CG	-	5250
		Sinter	843192	In-house	-	-
4.	Sponge Iron Plant	Coal	1018828	Imported	815062	203766
		Dolomite	520027	From Birmiritrapur, Orissa / Bilaspur, CG	416022	104005
		Pellet	1517630	In-house - Conveyor	-	-
5.	Pellet Plant	Iron Ore Fines	2160000	Barbil-Joda, Orissa	1944000	216000
		Limestone	18000	From Birmiritrapur, Orissa / Bilaspur, Raipur	-	18000

Sl. No.	UNITS	RAW MATERIAL	ANNUAL REQUIREMENT (IN TPA)	SOURCES	MODE OF TRANSPORTATION	
					Rail	Road
				CG / Katni MP		
		Bentonite	153000	Local Market	-	153000
		Coal	72000	Imported	64800	7200
6.	Producer gas Plant	Coal	158400	Imported	126720	31680
7.	Ductile Iron Pipe	Pig Iron	90000	In-house	-	-
		Zinc	700	Local Market	-	700
		Scrap	10000	In-house	-	-
8.	SMS (EAF Route)	Pig Iron	309913	In-house	-	-
		Scrap	19370	In-house	-	-
		Ferro	750	In-house	-	-
		Lime	39204	Local Market	-	39204
		DRI	66825	In-house	-	-
9.	Rolling Mill (EAF Billet)	EAF Billet	306000	In-house		
10.	SMS (IF Route)	Pig Iron-In House	104086	In-house	-	-
		Scrap	47348	In-house	-	-
		Ferro	1500	Local Market	-	1500
		DRI	871200	In-house	-	-
		Mkt. Pig Iron	37957	Local Market	-	37957
11.	Rolling Mill (IF Billet)	IF Billet	714000	In-house	-	-
12.	Cement Grinding Unit	Clinker	708000	Local Market	566400	141600
		Gypsum	60000	Dalmia Cement	-	60000
		Slag from BF	163800	In-house	-	-
		Fly Ash from CPP	288000	In-house	-	-
13.	Ferro	Ore	226300	Imported/Odisha	226300	-
		Coke & Coal	70300	Assam and Jharkhand	56240	14060
		Quartzite	32750	Local Market	-	32750
		Dolomite	30000	Imported	24000	6000
14.	CPP	Coal	229000	Imported/Local Market	183200	45800
		Dolochar	229000	In House	-	-

9.16.10 The details of solid waste generation and its management is furnished as below:

Sl. No.	Type	Quantity in Tons / Year	Utilization
1.	Dolochar from 4X350 TPD DRI Kilns	1,11,000	To be used in FBC power plant.
2.	Slag from 1x450 m ³ MBF	1,63,800	To be used for Cement making.
3.	Slag from (5X18 T + 8X8 T) Induction Furnaces	61,000	Slag will be used for Road Construction purpose / other civil construction purpose.
4.	Tar Sludge from Producer gas plant	12,000	Sold to WBPCB authorized vendor.
5.	Coal Ash from PGP	47,500	To be used for Making construction materials
6	Dust from ESP and Bag Filters of Sinter Plant	50,000	To be reused in process
7	Dust from ESP and Bag Filters of Pellet Plant	1,40,700	To be reused in process
8	Dust from GCP and Bag Filters of Blast Furnace	60,200	To be reused in Sinter Plant
9	Dust from ESP and Bag Filters of DRI Plant	70,500	To be reused in Sinter Plant
10	Dust from Bag Filters of Induction Furnaces	60,200	To be reused in process
11	Mill scales from rolling mill and casting machines	20,000	To be reused in Induction Furnaces

9.16.11 The targeted production capacity of the Integrated Steel Plant after expansion is 1.8 MTPA pellets, 0.85 MTPA Sinter, 0.3 MTPA Coke, 36000 Nm³/hour producer gas, 0.89 MTPA sponge iron, 0.6 MTPA hot metal/pig iron, 1.51 MTPA billets, 1.0 MTPA long steel products, 0.1 MTPA DI pipe, 1.2 MTPA cement grinding unit, 136 MW captive power plant and 0.1 MTPA Ferro Alloys. The major raw material, which will be handled, consists of Iron Ore, Coal, dolomite, Limestone, Manganese Ore, Quartzite etc. The raw materials will be purchased from mines located in Orissa, West Bengal, Jharkhand, MP and Chhattisgarh (depending upon availability). Coking coal will be imported. Raw materials will be received at railway siding located inside plant boundary.

9.16.12 The daily make up water requirement for the entire project is estimated as 11,170 m³/day (Existing Units: 4831 m³/day, Proposed Units: 6339 m³/day). The raw water will be sourced mainly from Ajay River / ADDA supply.

9.16.13 The power requirement of the project is estimated as 232 MW, out of which 136 MW will be obtained from proposed Captive Power Plant and the remaining 96 MW power will be obtained from State grid.

- 9.16.14 Baseline Environmental Studies were conducted during summer season i.e. from Oct, 2018 to Dec, 2018. Ambient air quality monitoring has been carried out at 8 locations and the data submitted indicated: PM₁₀ (61 µg/m³ to 118 µg/m³), PM_{2.5} (23 µg/m³ to 52 µg/m³), SO₂ (7 µg/m³ to 27 µg/m³) and NO_x (13 µg/m³ to 44 µg/m³). The results of the modeling study indicate that the maximum increase of GLC for the proposed project is 8.0 µg/m³ (SE direction), 5.2 µg/m³ (SE direction) and 3.0 µg/m³ (SE direction), with respect to the PM, SO₂ and NO_x.
- 9.16.15 Ground water quality has been monitored in 8 locations in the study area and analyzed. pH: 6.9 to 7.5, Total Hardness: 178 to 231 mg/l, Chlorides: 58 to 102 mg/l, Sulphate: 6 to 15 mg/l, Nitrate: 1.5 to 3.5 mg/l. Heavy metals are within the limits. Surface water samples were analyzed from 8 locations – 2 Ajay river water samples and 6 pond water samples. For Ajay River water, pH: 6.8 and 7.0; DO: 6.8 mg/l and 6.9 mg/l and BOD: 6 and 5 mg/l. For 6 pond water samples, pH: 6.7 to 7.4; DO: 5.7 to 6.4 mg/l and BOD: 5 to 9 mg/l.
- 9.16.16 Noise levels in the study area are in the range of 56.4 - 68.6 dBA for day time and 45.9 – 59.0 dBA for night time.
- 9.16.17 The Public hearing of the project was held on 31st May, 2019 at Nazrul Bhaban, Nandi Road, Jamuria, Dist. Paschim Bardhaman, West Bengal under the chairmanship of Sri. Prasanta Mandal, Additional District Magistrate, (Environment), Paschim Bardhaman for the proposed expansion project. The issues raised during the public hearing are abatement of pollution, employment opportunities and infrastructure related activities which have been addressed in the EIA report.
- 9.16.18 The company has earmarked an amount of INR 8.15 Crores towards Corporate Environment Responsibility (CER) activities. This fund shall be utilized over a period of 3 years. Company has identified certain areas, to be considered for implementing the CER activities in the context of the local scenario of the area which are given as below:

Sl. No.	PROPOSED CER ACTIVITIES	INVESTMENT (IN LACS)			Total (in Lakhs)
		Year 1	Year 2	Year 3	
A)	PUBLIC HEARING RELATED ACTIVITIES				
1.	Skill development to unemployed local youth through National Skill Development Corporation, Govt. of India Scheme	16	16	12	44
2.	Development of self-help employment opportunities at Dhasna Village by arranging training programme on making Jam, Jelly and Sauce.	8	7	5	20
3.	Development of parks, plantation of trees in the nearby areas.	15	15	5	35
4.	Reformation of the Singaran River by clearing of water hyacinth and plastic waste	30	10	10	50

Sl. No.	PROPOSED CER ACTIVITIES	INVESTMENT (IN LACS)			Total (in Lakhs)
		Year 1	Year 2	Year 3	
5.	Drinking Water Infrastructure facility at nearby villages (Tubewell: 25 nos. @ Rs. 1.0 Lakhs per tubewell)	10	10	5	25
6.	Upgradation, cleaning & maintenance of local village ponds (15 nos. @ Rs. 2 Lakhs per pond)	10	10	10	30
7.	Construction of sheds in nearby two primary schools.	10	10	8	28
8.	Health check-up programme in nearby villages by arranging camps	16	16	12	44
9.	Donation for renovation of Chandipur Health Center.	15	10	10	35
10	Providing sanitary napkins to women for hygienic awareness.	6	6	6	18
A)	PUBLIC HEARING RELATED ACTIVITIES				
11.	Arrangement of three doctors (Gynecologist, Child Specialist and one General Physician) at Bijaynagar health center.	18	-	-	18
12.	Providing permanent ambulance (2 nos.) facility for 24 hours.	13	13	4	30
13.	Arrangement of homeopathy doctors in Bijaynagar and Dhasna.	15	-	-	15
14.	Setting up of Football Coaching center and Football Academy	10	7	7	24
15.	Free coaching classes from Class VII I to Class XII for both English and Bengali medium students.	10	8	7	25
16.	Free Spoken English and Short Hand Typing Classes.	10	8	7	25
17.	Distribution of clothes to the nearby villagers to economically backward classes.	9	8	8	25
18.	Supporting books and accessories to the meritorious students from nearby villages	9	8	8	25
19.	Helping Ananda Ashram Charitable Trust at Satgram	5	5	4	14
B)	NEED BASED ACTIVITIES				
20	Construction of 12 Set Toilets at nearby villages (@ Rs. 3.00 Lakhs per set of 2 Toilets, separately for Ladies & Gents)	12	12	12	36
21	Construction and repairing of Metal Road (15 km) in villages (@ Rs. 8 Lakhs per Km)	40	40	40	120
22	Development of Community Hall	10	5	-	15

Sl. No.	PROPOSED CER ACTIVITIES	INVESTMENT (IN LACS)			Total (in Lakhs)
		Year 1	Year 2	Year 3	
23	Financial Support to the Local School for extension of building / class room/ development of library facilities	10	8	7	25
24	Drainage Development - side drains & Construction of Culvert on drainage	27	22	22	71
25	Provide Dustbin in Village (under Swachh Bharata Scheme)	6	6	6	18
Sub-Total		341	261	213	
GRAND TOTAL					815

9.16.19 The capital cost of the project is Rs 1661.02 Crores and the capital cost for environmental protection measures is proposed as Rs 174 Crores. The annual recurring cost towards the environmental protection measures is proposed as Rs 17.4 Crores. 7000 persons will get Employment during operational phase. The details of capital cost for environmental protection measures and annual recurring cost towards the environmental protection measures is as follows:

Item	Cost (in Crores)	Cost (in Crores)
Cost of Air Pollution Control Systems	78.00	7.8
Cost of Water conservation & Pollution Control	15.75	1.58
Cost of Solid/hazardous Waste Management System	14.25	1.43
Green belt development	15.75	1.58
Noise Reduction Systems	15.00	1.5
Occupational Health Management	13.50	1.35
Risk Mitigation & Safety Plan	15.75	1.58
Environmental Management Department	6.00	0.60
GRAND TOTAL	174.00	17.40

9.16.20 Greenbelt will be developed in 93 Ha which is about 35.4% of the total acquired area. Local and native species will be planted with a density of 2500 trees per hectare. Total no. of 1,30,500 saplings will be planted and nurtured in 87 Hectares in 5 years.

9.16.21 There is no court case or violation under EIA Notification to the project or related activity.

9.16.22 Name of the consultant: M/s. Envirotech East Private Limited [S.No. 52, List of Accredited Consultant Organizations (Alphabetically) Rev. 78, July 10, 2019].

Observations of the Committee

9.16.23 The Committee noted that with respect to project cited above, a complaint has been received in the Ministry wherein the complainant alleged that the project proponent has established 2 modules of pellet plant with a capacity of 0.6 MTPA each against the sanctioned capacity of 0.6 MTPA as per the EC accorded by the Ministry. Further, it is

alleged that the project proponent has reported that capacity of the pellet plant modules as 0.48 MTPA and 0.20 MTPA in place of 0.6 MTPA each. It is also mentioned that unit has exceeded the pellet production beyond the sanctioned capacity of 0.6 MTPA. In this regard, the project proponent made available the inspection report of WBPCB dated 8/08/2018 wherein it has been categorically stated that the capacity of pellet plant module as 40000 TPM (0.48 MTPA) and 10000 TPM (0.20 MTPA) respectively. Besides, the Committee noted that issues such as management of tar and phenolic effluents, permission for water drawl power generation from DRI plant, action plan for rain water harvesting and green belt development have not been adequately covered in the EIA report. The cost earmarked towards CER related activities is not as per the Office Memorandum of MoEF&CC. Higher concentration of Particulate matter is reported at the project site and reasons for the same has not been furnished.

Recommendations of the Committee

9.16.24 In view of the aforesaid and after detailed deliberations, the Committee deferred the consideration of the above proposal and sought following additional information for further consideration:

- i. Closure report from Regional Office of the MoEF&CC on the non-compliances observed in its report dated 11/12/2018 and 14/01/2019.
- ii. Report from Regional Office of MoEF&CC regarding existing configuration of two pellet plant modules along with year-wise production levels of pellet plant for the last three years shall be submitted.
- iii. CER table shall be revised in accordance with the MoEF&CC O.M. dated 1/05/2018.
- iv. Action plan for management of tar and phenolic effluent shall be submitted.
- v. Action plan for green belt development covering 33% inside plant and 7% of project land outside the plant shall be furnished.
- vi. Note on possible power generation from DRI plant and productivity of the blast furnace shall be furnished.
- vii. Scheme for rain water harvesting shall be furnished.
- viii. Justification/reason for reporting of higher concentration of PM₁₀ and PM_{2.5} in ambient air at the project site and the actions proposed by the industry to control the stack emissions shall be submitted.
- ix. Permission for water drawl from the Competent Authority shall be submitted.

9.17 Capacity Enhancement by Installation of four Induction Furnaces of 15 MT each in existing plant premises of **M/s J.B. Rolling Mills Limited at Trilokpur Road Kala Amb, village Johran, Tehsil Nahan, Trilokpur Road, Kala Amb, Village Johran, Tehsil Nahan& District Sirmaur, Sirmaur, Himachal Pradesh – [Proposal No. IA/HP/IND/86898/2015; F.No. J11011/218/2015-IA(I)] – Further Consideration for Environmental Clearance based on ADS reply.**

9.17.1 M/s. M/s J.B. Rolling Mills Limited has made an online application vide proposal no. **IA/HP/IND/86898/2015** dated 28th November 2018 along with copies of EIA/EMP report and Form – 2 seeking Environmental Clearance (EC) under the provisions of the EIA Notification, 2006 for the project mentioned above. The proposed project activity is

listed at Sl. No. 3(a) Metallurgical Industries (Ferrous and Non-ferrous) under Category “A” EIA Notification, 2006 and the project is appraised at the Central level.

- 9.17.2 The application of M/s J.B. Rolling Mills Limited was initially received in the Ministry on 28th October 2015 for obtaining Terms of Reference (ToR) as per EIA Notification, 2006. The project was appraised by the Expert Appraisal Committee (Industry) [EAC(I)] during 1st meeting on 18th to 20th November, 2015 and prescribed ToRs to the project for undertaking detailed EIA study for obtaining environmental clearance. Accordingly, the Ministry of Environment, Forest and Climate Change had prescribed ToRs to the project on 3rd December 2015 vide F.No. J-11011/218/2015-IA-II(I). Based on the ToRs prescribed to the project, the project proponent submitted an application for environmental clearance to the Ministry on 28th November 2018 vide online proposal No IA/HP/IND/32166/2015.
- 9.17.3 The project of M/s J.B. Rolling Mills Limited located in Trilokpur Road Kala Amb, village Johran, Tehsil Nahan and Dist. Sirmaur. Himachal Pradesh State is for Expansion of total production capacity by addition of two Induction Furnaces each of 15 T per heat capacity and augmentation of integrating melting from 28,800 TPA to 2,34,000 TPA and from 45,000 TPA to 3,36,000 TPA of rolled products (MS Bar).
- 9.17.4 The total land required for the project is 5.96 ha. No forestland involved. The entire land has been acquired for the project. It has been reported that no water body/ water body exist around the project and modification/diversion in the existing natural drainage pattern at any stage has not been proposed.
- 9.17.5 The topography of the area is mainly plain and reported to lie between 30^o31’2.17’’ to 30^o31’7.63’’ N Latitude and 77^o12’1.49.35’’ to 77^o11’1.98’’E Longitude in Survey of India topo sheet No. H43L2, H43L3 at an elevation of 350m AMSL. The ground water table reported to ranges between 3.76 to 43.98 meter below the land surface during the pre-monsoon season and 2.98 to 37.35 meter below the land surface during the post-monsoon season.
- 9.17.6 No national park/wildlife sanctuary/biosphere reserve/tiger reserve/elephant reserve etc. are reported to be located in the core and buffer zone of the project. The area also does not report to form corridor for Schedule-I fauna. No Schedule-I species is found in the 10 km radius of the project site.
- 9.17.7 The targeted production capacity of the Billets/Ingots is 2,34,000 TPA and MS rolled product is 3,36,000 TPA of rolled products. MS Scrap, Ferro Alloys &MS Billets will be used as basic raw material to manufacture TMT Bar, Girder & Angels. Raw materials will be purchased from open market and transported to site through trucks.
- 9.17.8 The total fresh water requirement of the project is estimated as 28 m³/day, which will be sourced from the DIC (Industries Department, and Govt. of Himachal Pradesh). Permission is granted by Industrial Area Development Agency, Kala-Amb, Distt-Sirmaur (HP) vide letter No.1102 dated 01/11/2018.
- 9.17.9 The power requirement of the project is estimated to be 19,475 KW; the permission has been obtained from the Himachal Pradesh State Electricity Board (HPSEB).

- 9.17.10 Baseline Environmental Studies were conducted during winter season i.e., from Dec,2015 to Feb., 2016 and additionally for one month study was conducted during 15th Dec'18 to 16th Jan'19. Ambient air quality monitoring has been carried out at 10 locations during 1st December'15 to 29th February 2016 and the data indicated: PM₁₀- 58.10µg/m³ to 88.70µg/m³ and 63.71 to 89.31 µg/m³ respectively; PM_{2.5}- 22.50 to 48.90µg/m³ and 28.84 to 46.73 µg/m³ respectively, SO₂ - 4.10 to 19.90 µg/m³ and 8.94 to 20.75 µg/m³ respectively and NO_x -15.10 to 29.80 µg/m³ and 16.31 to 32.12 µg/m³. The results of the modeling study indicate that the maximum increase of GLC for the proposed project is 2.35 µg/m³ with respect to the PM₁₀.
- 9.17.11 Ground water quality has been monitored in 8 locations in the study area during 1st Dec, 2015 to 28th Feb, 2016 and analyzed. PH: 7.15 to 8.55, Total Hardness: 21 to 612 mg/l, Chlorides: 10 to 120 mg/l, Fluoride:0 mg/l. Heavy metals are within the limits. During additional one month study from 16th Dec, 2018 to 15th Jan, 2019 parameters such as pH:7.14-8.77, Total Hardness: 59-596mg/L, Chlorides: 16.44–110.14mg/L, Fluoride and heavy metals are also within the limits.
- 9.17.12 Surface water samples were analyzed from 8 locations during 1st Dec, 2015 to 28th Feb, 2016. pH: 7.52 to 8.2; DO: 10.2 to 10.8 mg/l and BOD: <2 to 3.4mg/l, COD:4 to 4.5mg/l and during additional one month study from 16th Dec, 2018 to 15th Jan, 2019 parameters were found as pH: 7.27 to 8.17, DO: 8.1 to 8.9 and BOD: <2 to 3.5 mg/l, COD: <4 to 5.4 mg/l.
- 9.17.13 Noise levels during monitoring period from 1st Dec, 2015 to 28th Feb, 2016 are in the range of 47.52 - 65.27 dB (A) during daytime and 42.18 - 54.85 dB(A) during nighttime & during additional one month study from 16th Dec, 2018 to 15th Jan, 2019 are in the range of 47.18 - 65.25 dB (A) at day time and 43.69- 54.88 dB (A) at night time.
- 9.17.14 No R&R is involved. It has been envisaged that no families to be rehabilitated.
- 9.17.15 It has been reported that a total of 87 TPD of Slag, 46 TPD of Mill Scale and 3 TPD of APCD dust will be generated due to the project, out of which mill scale waste will be sold to the market, slag after metal extraction will be sent to paver block industry for interlock block making. APCD waste will be sent to TSDF site for proper disposal. Zinc metal recovery from APCD dust is under consideration for implementation. It has been envisaged that an area of 2.0ha, will be developed as green belt around the project site to attenuate the noise levels and trap the dust generated due to the project development activities.
- 9.17.16 It has been reported that the Consent to Operate from the Himachal Pradesh State Pollution Control Board obtained vide Certificate No. HSPCB/PCB-ID10243/7219-19 dated 21/09/2018. This consent is valid up to 31/03/2021.
- 9.17.17 The Public hearing of the project was held on 18.06.2018 at Project site under the chairmanship of District Collector, Sirmaur District for production of 780 TPD of Billets/Ingots and 1120 TPD of MS rolled products (TMT Bar, Girders& Angels etc). The issues raised during public hearing are employment, pollution control and Providing Health Facility. The issues raised during public hearing and response of the project proponent with action plan are tabulated below:

Issues Raised	Commitment	Budgetary provision
Problem in the growth is plant due to impacts of Air Pollution.	The Project proponent assured that they will install the air pollution control devices like Spark Arrestor, Pulsejet Bag Filter & I.D. Fan based on latest technology with adequate stack height and there will be no impact on the plants.	Rs 1.5 Crores will be spent on Air Pollution Control equipment and an amount of Rs. 30 lakhs will be spent annually for the same towards EMP.
They asked for the provide employment for the local peoples	Company committed to provide 132 nos. of employment in the expansion project and preference will be given to Local Villagers. Vocational Training Center for providing training to youths on self-employment	Budget shall be allocated as per employees' skill and designations Rs. 1.5 lakhs allocated for Vocational Training Center
The villagers requested the company to provide the Ambulance service to the local peoples.	The project proponent assured that they provide the company's ambulance to local peoples during emergency.	Rs. 1.5 Lakhs allotted by PP for Healthcare under CER Budget.
Company shall planted more trees to control the pollution.	The Project proponent assured that they will plant the trees in the area to control the pollution.	Rs. 15 Lakhs of Greenbelt development allotted under EMP budget.

9.17.18 An amount of Rs. 12 lakhs (1% of expansion Project cost) has been earmarked for Corporate Enterprises Responsibility based on public hearing issues. The details of CER proposed are as follows:

S.No.	Description	Amount to be spent		Total (Rs.in Lakhs)
		First Year	Second Year	
		Rs.in Lakhs	Rs.in Lakhs	
1	Employment (Vocational Training for Skill development for self-employment like Sewing,	1.00	0.50	1.50

	Pickle making, Craft for youth of nearby villages)			
2	Greenbelt Development (Plantation in and around the project site, nearby villages and schools)	1.50	1.00	2.50
3	Health Camp (Health, Eye etc. check up camp will be organized for villagers)	1.00	0.50	1.50
4	Educational Facility (Distribution of School dress, books, Furniture, water cooler etc.)	2.00	1.50	3.50
5	Community Development (Rain water harvesting structure & maintenance of street light)	2.00	1.00	3.00
Total		7.50	4.50	12.00

9.17.19 The capital cost of the project is Rs12,091Lakh (including capacity enhancement) and the capital cost for environmental protection measures is proposed as Rs235Lakhs. The annual recurring cost towards the environmental protection measures is proposed as Rs66Lakhs. The employment generation from the proposed project / capacity enhancement is 132. The details of capital cost for environmental protection measures and annual recurring cost towards the environmental management is as follows:

S.No.	Particulars	Capital Cost (in lacs)	Recurring Cost per annum (in lacs)
1.	Air Pollution Control Devices (Bag Filters, online continuous emission monitoring system etc.)	150	30
2.	Water Pollution Control Measures	40	10
3.	Noise Pollution Control Measures	20	05
4.	Environment Monitoring and Management	-	10
5.	Occupational Health	-	02
6.	Green Belt Development	15	05
7.	Rain Water Harvesting	10	04
Total		235	66

9.17.20 Greenbelt will be developed in 2.00 Ha which is about 33.56% of the total acquired area. A 40m wide greenbelt, consisting of at least 3 tiers around plant boundary will be developed as greenbelt and green cover as per CPCB/MoEF&CC, New Delhi guidelines. Local and native species will be planted with a density of 2000 trees per

hectare. Total no. of 4000saplings will be planted and nurtured in 2.0hectares in 5 years of which 1000 no. of plants have already been planted.

- 9.17.21 The proponent has mentioned that there is no court case or violation under EIA Notification to the project or related activity.
- 9.17.22 Consultant: Shivalik Solid Waste Management Limited, 1st Floor, SCO 20-21, Near Hotel Dolphin, Dhakoli, Zirakpur, Punjab 140604, Certificate No. NABET/EIA/1922/RA 0128, Sr. No. 134, Rev. 78, July 10, 2019.

Observations and Recommendations of the Committee

- 9.17.23 After detailed deliberations, the committee recommended the proposal for grant of Environmental Clearance with the following specific conditions along with the general conditions as applicable as per the Ministry's O.M. No. 22-34/2018-IA.III dated 9/8/2018.
- i. Project Proponent shall adhere to Zero liquid discharge.
 - ii. Project Proponent shall adhere to 100% waste utilization.
 - iii. Emissions from bag houses shall be restricted to 10 mg /Nm³.

- 9.18** Addition of wood in the existing raw material mix (Bagasse or Wheat straw, imported soft wood Pulp/Imported waste paper, soap stone powder by **M/s. Mohit Paper Mills limited** located at 9th Km stone, Nagina Road, Village Abdullpur Munna, Tehsil and District Bijnor (**Uttar Pradesh**) - [Online Proposal No. IA/UP/IND/110895/2019, File No. J-11011/130/2017-IA II (I)]- **Amendment** in Environmental Clearance regarding

Consideration of the proposal was deferred as the Project Proponent did not attend the meeting. The proposal may be considered subject to satisfactory explanation of the reasons of absence by the applicant.

- 9.19** Proposed Mill Development Plan II (MDP II) to increase production of paper, ECF Bleached wood and Bagasse pulp and Captive co-generation power by **M/s. Seshasayee Paper and Boards Limited** located at Village Alampalayam, Pallipalayam, R.S.P.O Cauvery, Taluk Tiruchengodu, District **Namakkal**, Tamil Nadu [Online Proposal No. IA/TN/IND/109033/2019, File No. J-11011/194/2013-IAII(I)] - **Amendment in Environmental Clearance regarding**

- 9.19.1 M/s. Seshasayee Paper and Boards Limited has made an online application vide proposal no. IA/TN/IND/109033/2019 dated 04/01/2019 along with Form 4 sought for amendment in the Environmental Clearance accorded by the Ministry vide letter no. J-11011/194/2013-IA-II(I) dated 22/01/2016 for using up to 36,500 BD TPA of Recycled Fibre Pulp from their Tirunelveli plant to make paper.

Details submitted by the project proponent

- 9.19.2 M/s. Seshasayee Papers and Boards Limited located at village Odapalli, Taluka Tiruchengode, District Namakkal, Tamil Nadu has earlier obtained Environmental Clearance by the Ministry of Environment, Forest and Climatic Change (MoEF&CC) vide Letter No. J-11011/194/2013- IA II (I) dated 22nd January,2016 for the Mill

development Plan II (MDP-II) to increase the production of existing paper machine capacity from 1,20,000 TPA to 1,65,000 TPA of finished paper, up-gradation of existing Elemental Chlorine Free (ECF) bleached wood pulp line capacity from 115,000 BD TPA to 145,000 BD TPA, Bagasse pulp line capacity - (35,000 BD TPA) (No Change in capacity), increase in Captive Co-generation power capacity (from 40 MW to 55 MW).

9.19.3 M/s. Seshasayee Papers and Boards Limited, Erode has Implemented all the facilities envisaged in the EC and obtained Consent to Operate for Expansion of Mill Development Plan II (MDP-II) vide Consent Order No. 170728467408 (Air) and 170718467408 (Water); Proceedings No. T12/TNPCB/F.0030NML/RL/NML/A&W/2017 dated: 20/04/2017 and Renewal of Consent Order No. 1808211849687 (Air) and 1808111849687 (Water); Proceedings No. T1/TNPCB/F.019KMP/RL/KMP/A&W/2018 dated: 29.10.2018 valid up to 31st March 2020.

9.19.4 M/s. Seshasayee Papers and Boards Limited (SPB) has another Unit at Tirunelveli which has obtained EC from State Environmental Impact Assessment Authority (SEIAA), Tamil Nadu vide letter No: SEIAA-TN/F.1941/TVLI/5(i) &1(d)/EC-12/2013, dated 1/04/2015 for manufacturing of 1,10,000 TPA of paper and 58,000 BD TPA of De-Inked Waste paper pulp (Recycled Fibre (RCF) Pulp). However, the said unit is not able to use even 50% of the RCF pulp due to quality issues such as “stray ink particles” affecting the cleanliness of the final product. Therefore, De-inked pulp production is restricted to less than 40%. Hence SPB, Tirunelveli approached SEIAA to permit / Amend the EC to send a part of the RCF pulp to SPB Erode unit and made a presentation to SEAC, Chennai SEAC, Tamil Nadu directed SPB-Tirunelveli to obtain amendment to EC issued by MoEF&CC for Erode unit to consume RCF pulp. Accordingly, SPB has approached MoEF&CC seeking permission for use of 36,500 BD TPA of Recycled Fibre Pulp in the Erode Unit to make paper. There will not be any change in consented production quantity of Unit: Erode and Raw materials (wood and bagasse quantity) as the pulp to paper conversion involves only slushing and pumping to paper machine.

9.19.5 The salient features of the proposed amendment are given as below:

S. No	Description	EC/ Consented Quantity	Amendment Quantity (BD TPA)	Remarks
A	Intermediate Materials			
1.	Wood Pulp, BD TPA	1,45,000	1,45,000	No Change
2.	Bagasse Pulp, BD TPA	35,000	35,000	No Change
3.	Total Pulp Production, BD TPA	1,80,000	1,80,000	No Change
4.	RCF pulp from Unit: Tirunelveli (Amendment), BD TPA	-	Upto 36,500	Up to 36,500 TPA of RCF pulp will be sent from Unit: Tirunelveli after Amendment. An equal quantity of Virgin pulp will be sent back to Unit: Tirunelveli, so

S. No	Description	EC/ Consented Quantity	Amendment Quantity (BD TPA)	Remarks
				there will not be any change in the total consented pulp quantity production or usage.
B. Products				
5.	Paper Production	1,65,000 TPA	1,65,000 TPA	No change.
C. Utilities				
6.	Power consumption	55 MW	55 MW	No Change
7.	Steam Consumption	217 TPH of steam	217 TPH of steam	No Change
8.	Fresh water consumption	34,000 m ³ /day	34,000 m ³ /day	No Change
9.	Wastewater discharge to WWTP	29,800 m ³ /day	29,800 m ³ /day	No Change

9.19.6 The proposed amendment required is furnished as below:

S.No	Reference of Approved EC	Description as per Approved EC	Amendment Required
1.	F.No.J-11011/194/2013-IA-II (I), dated: 22 nd January 2016	Mill development Plan II (MDP-II) to increase the production of existing paper machine capacity from 1,20,000 TPA to 1,65,000 TPA of finished paper, up-gradation of existing Elemental Chlorine Free (ECF) bleached wood pulp line capacity from 115,000 BD TPA to 145,000 BD TPA, Bagasse pulp line capacity - (35,000 BD TPA) (No Change in capacity), increase in Captive Co-generation power capacity (from 40 MW to 55 MW)	Mill development Plan II (MDP-II) to increase the production of existing paper machine capacity from 1,20,000 TPA to 1,65,000 TPA of finished paper, up-gradation of existing Elemental Chlorine Free (ECF) bleached wood pulp line capacity from 115,000 BD TPA to 145,000 BD TPA, Bagasse pulp line capacity - (35,000 BD TPA) (No Change in capacity), <u>Usage of upto 36,500 BD TPA RCF pulp from SPB Tirunelveli (without increase in consented Quantity of Pulp and Paper production),</u>

S.No	Reference of Approved EC	Description as per Approved EC	Amendment Required
			increase in Captive Co-generation power capacity (from 40 MW to 55 MW) (No Change in capacity).

9.19.7 Name of Consultant M/s. ABC Techno Labs India Private Limited, #400, 13th Street, Sidco Industrial Estate (North Phase), Ambattur, Chennai -600 098, [S.No. 4, List of Accredited Consultant Organizations (Alphabetically) Rev. 78, July 10, 2019].

Observations and recommendation of the Committee

9.19.8 The Committee considered the proposal, and after detailed deliberations, recommended the proposal for amendment in the EC letter no. J-11011/194/2013-IA-II(I) dated 22/01/2016 as cited above subject to the following specific condition:

- i. There shall be no increase in chemical utilization and water consumption while maintaining the production of paper as approved.

9.20 Expansion of 1.44 MTPA Integrated Steel Plant for value addition by **M/s. Shyam Metalics & Energy Limited** located at Pandoloi, Rengali, Sambalpur Orissa [Online Proposal No. IA/OR/IND/80405/2018, File No. J-11011/495/2006-IA II (I)] **(under 7(ii) of EIA notification) - Amendment In Environmental Clearance regarding**

9.20.1 M/s. Shyam Metalics & Energy Limited has made online application vide proposal no. IA/OR/IND/80405/2018 dated 18/06/2019 requested for issue of amendment in the environmental clearance accorded by the Ministry vide letter no. J-11011/495/2006- IA-II(I) dated 21/05/2019.

Details submitted by the project proponent

9.20.2 MoEF&CC has accorded Environmental Clearance to M/s. Shyam Metalics & Energy Limited for expansion of pellet plant from 0.3 MTPA to 1.2 MTPA under para 7(ii) of the EIA Notification, 2006 at Rengali, Sambalpur, Sambalpur, Odisha vide letter no. J-11011/495/2006-IA.II(I) dated 21/05/2019.

9.20.3 The details of the existing unit along with the production capacity is given as below:

Sl. No	Facilities	ultimate capacity as approved in EC(TPA)	project implemented	construction to be completed awaited for CTO	change in EC configuration	Final EC capacity in TPA.
1	Sponge Iron	8,00,000	5,00,000 TPA+300000TPA	300000TPA	No Change	8,00,000
2	Billet caster	2,00,,000	2,00,000 TPA		No change	2,00,000
3	Rolling Mill	6,60,000	60,000TPA+600000 TPA	600000	No Change	6,60,000
4	Sinter Plant	882000	Nil	NIL	To be dropped	0

Sl. No	Facilities	ultimate capacity as approved in EC(TPA)	project implemented	construction to be completed awaited for CTO	change in EC configuration	Final EC capacity in TPA.
5	MBF	742500	Nil	NIL	To be dropped	0
6	Ferro alloys	250000	1,33,000TPA+117000 TPA	1,17,000 TPA	No Change	2,50,000
7	SMS	1444286	3,73,000TPA+1071286TPA	10,71,286TPA	No change in	14,44,286
8	Coke oven	550000	Nil	NIL	To be dropped	0
9	I/O Pelletization & beneficiation	300000	3,00,000 TPA	9,00,000TPA Seeking approval. Capacity enhancement of existing 3,00,000 to 6,00,000 and addition of new capacity of 6,00,000	Capacity Enhancement by 9,00,000TPA.	12,00,000
10	Coal washery	18,00,000	3,00,000TPA+700000 TPA	7,00,000 TPA	Capacity reduction by 8,00,000 TPA	10,00,000
11	Power	225MW	85MW+73 MW	73 MW	Reduction by 67 MW	158 MW
12	Bloom Caster	353500	1,73,000TPA+1,80,500 TPA	1,80,500 TPA	No Change	3,53,500
13	Lime Plant	60000	60,000 TPA	60,000 TPA	No change	60,000
14	Producer Gas Plant	48450 Nm ³ /hr	48450 Nm ³ /hr	48450 Nm ³ /hr	No change	48450 Nm ³ /hr

9.20.4 M/s. Shyam Metallics & Energy Limited has made online application vide proposal no. IA/OR/IND/80405/2018 dated 18/06/2019 and requested the Ministry to incorporate the configuration of the aforesaid unit as submitted in their original application. The configuration of the said units is given as below:

S.No.	Facilities	Ultimate capacity as approved in EC (TPA)	Project Implemented	Construction to be Completed awaited for CTO	Change In EC configuration	Final Configuration	Final EC Capacity In TPA.
1	Sponge Iron	8,00,000	5,00,000TPA+3,00,000TPA	3,00,000 TPA	No Change	2x350TPD+2x100TPD+4x500TPD	8,00,000
2	Billet Caster	2,00,000	2,00,000 TPA	-	No Change	1x200000 TPA	2,00,000
3	Rolling Mill	6,60,000	60,000+6,00,000 TPA	6,00,000	NO Change	1x100,000 TMT ROD 1x70000 TMT bar Mill 1x60000Structural Mill 2x200000Wire Rod Mill	6,60,000

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S.No.	Facilities	Ultimate capacity as approved in EC (TPA)	Project Implemented	Construction to be Completed awaited for CTO	Change In EC configuration	Final Configuration	Final EC Capacity In TPA.
						1x30000 Pipe Mill	
4	Sinter Plant	8,82,000	NIL	NIL	To be Dropped	NIL	0
5	MBF	7,42,500	NIL	NIL	To be Dropped	NIL	0
6	Ferro Alloys	2,50,000	1,33,000TPA+1,17,000TPA	1,17,000TPA	NO Change	2x6MVA+2X9MVA+3X11MVA+Matching capacity for 1,17,000 TPA	2,50,000
7	SMS	14,44,286	3,73,000TPA+10,71,286 TPA	10,71,286 TPA	NO Change	EAF1x80T(18H)/hot metal route;IF.15x18T+4x12T+4x8T IF, with matching LF	14,44,286
8	Coke Oven	5,50,000	NIL	NIL	To Be dropped	NIL	0
9	I/O Pelletisation and Benefication	3,00,000	3,00,000TPA	9,00,000 TPA seeking approval. Capacity enhancement of existing 3,00,000 TPa to 6,00,000TPa and addition of New capacity of 6,00,000 TPa	Capacity enhancement by 9,00,000 TPA	2x6,00,000 TPA	12,00,000
10	Coal Washery	18,00,000	3,00,000+7,00,000TPA	7,00,000TPA	Capacity Reduction by 8,00,000 TPA	10,00,000TPA	10,00,000
11	Power	225MW	85MW+73MW	73 MW	Reduction by 67MW	2x30MW+1x25MW+73MW(43+30MW)	158MW
12	Bloom caster	3,53,500	1,73,000TPA+1,80,500TPA	1,80,500TPA	No Change	NIL	3,53,500
13	Lime Plant	60,000	60,000TPA	60,000TPA	No Change	1x60,000TPA	60,000
14	Producer Gas Plant	48,450Nm ³ /hr	48450 Nm ³ /Hr	48450 Nm ³ /Hr	No Change	48450 Nm ³ /Hr	48450 Nm ³ /hr

Observations of the Committee

9.20.5 The Committee noted that the amendment sought by the project proponent are factual in nature.

Recommendations of the Committee

9.20.6 After detailed deliberations, the Committee recommended for issue of amendment in the EC dated 21/05/2019 by incorporating the configurations of the various units as mentioned in the paragraph cited above.

9.21 Integrated Cement Project - Clinker (3.0 MTPA), Cement (2.5 MTPA), CPP {54 (2x27) MW}, WHRS (15 MW) and D.G. Set (1000 KVA) at Village: Jamuna, Tehsil: Rampur Baghelan, District: Satna (**Madhya Pradesh**) by **M/s. Dalmia Cement (Bharat) Ltd.** [Online Proposal No. IA/MP/IND/93273/2019, File No. J-11011/42/2019-IA-II(I)] - Prescribing of **Terms of Reference** based on site visit report by sub-committee of EAC

9.21.1 M/s. Dalmia Cement (Bharat) Ltd. proposes to install a new/ Greenfield Integrated Cement Project: Clinker (3.0 MTPA), Cement (2.5 MTPA), CPP {54 (2x27) MW}, WHRS (15 MW) and D.G. Set (1000 KVA) at Village: Jamuna, Tehsil: Rampur Baghelan, District: Satna (Madhya Pradesh). It is proposed to set up plant based on dry process technology. The project proponent submitted an application in the prescribed format along with Form-1 and other reports to the Ministry online on 30th January, 2019 vide Online Application No. IA/MP/IND/93273/2019.

9.21.2 Proposed Integrated Cement Project was considered by EAC (Industry - I) on 21st Feb., 2019; in which after detailed deliberations, it was decided that sub-committee comprising of EAC members and Officer concerned with the subject matter will undertake a site visit and thereafter the proposals would be considered by the EAC for grant of ToR. The sub-committee completed the site visit on 23rd June, 2019. Now, the project has been scheduled to be considered in 09th REAC meeting (Agenda item no. 9.22) for Prescribing Terms of Reference based on site visit report by Sub-committee of EAC on 31st July, 2019.

9.21.3 The proposed unit will be located at Village: Jamuna, Tehsil: Rampur Baghelan, District: Satna (Madhya Pradesh).

9.21.4 The land area required for the proposed Project is 101.5 ha; out of which 98.35 ha is private agricultural land and rest 3.15 ha is Govt. land. No forest land is involved. The entire land is yet to be acquired for the proposed project. Out of the total project area, 33.5 ha (33%) will be used for green belt development/plantation. The proposed Plant shall require about 72 ha for setting up of the plant & allied infrastructure. Additionally an area of 24 ha (33% of the plant area) is earmarked for Green belt development. A linear covered conveyor belt is proposed over an area of ~5.5 Ha (~3.7 km length) which includes 1.5 ha of linear plantation along the conveyor belt. Thus total land required for the proposed project is ~ 101.5 ha. However, apart from above proposed green belt area, Plantation along roads, Gardens, Lawns etc. will be undertaken. Total cumulative Green belt/plantation area will be 33.5 ha (33% of 101.5 ha).

- 9.21.5 No National Park / Wildlife Sanctuary / Biosphere Reserve/ Tiger Reserve/ Elephant Reserve, etc. are reported to be located in the core and buffer zone of the project. The area also does not report to form corridor for Schedule -I fauna.
- 9.21.6 Total project cost is approx. Rs. 1875 Crores. Proposed employment generation is approx.865 (direct) and indirect about 1000-1500.
- 9.21.7 The targeted production capacity of Integrated Cement Project: Clinker (3.0 MTPA), Cement (2.5 MTPA), CPP {54 (2x27) MW}, WHRS (15 MW) & D.G. Set (1000 KVA). Part of the clinker will be transported to split Grinding Unit (GU) of 2.5 MTPA proposed to be setup in Uttar Pradesh (near Rae Bareilly). Application for EC for said GU is yet to be filed. The Limestone requirement for the plant would be met from three Captive Limestone Mines in Satna Dist. viz., (i) Proposed BairihaLimestone Mine (ML area 575.830 ha) with peak production capacity of 4.0 MTPA (limestone) at Villages: Bairiha, Patarhai& Janardanpur, Tehsil: Rampur Baghelan, (ii) Proposed Jamuna Limestone Mine (ML area 89.234 ha) with peak production capacity of 0.5 MTPA (limestone) at Village – Jamuna, Tehsil – Rampur Baghelanand (iii) Proposed Pagra-Jhiriya Limestone Mine (ML area 395.965 ha) with peak production capacity of 1.5 MTPA (limestone) at Village-Pagra, JhiriyaKothar, JhiriyaBajpain&JhiriyaKoparihan, Tehsil- Amarpatan. The Limestone transportation will be done through covered Conveyor Belts (by road initially and during emergency/breakdown situation). Limestone from remotely located Captive Pagra-Jhiriya Limestone Mine will be transported by road. The proposed capacity for different products for new site area is as below:

Name of Unit	Proposed Capacity
Clinker (MTPA)	3.0
Cement (MTPA)	2.5
Captive Power Plant (MW)	54 (2 x27)
WHRS (MW)	15
D.G. Set (KVA)	1000

- 9.21.8 The electricity load of 55 MW will be sourced from proposed CPP {54 MW (2x27)}, WHRS (15 MW) and also from State Grid at Tapa sub-station. It is also proposed to install 1000 KVA DG set for backup and emergency.
- 9.21.9 Raw materials required for the proposed project are: 1) Limestone which will be sourced from Proposed Captive Limestone Mines (a) Bairiha Limestone Mine, (b) Jamuna limestone Mine and (c) Pagra-Jhiriya Limestone Mine, 2) Clay & Shale will be purchased from local market; 3) Laterite/Bauxite/Iron Ore will be purchased from Katni; 4) Fly ash will be sourced from Captive Power Plant/Vindhyachal Power Plant/NTPC Power Plant/Sanjay Gandhi Thermal Power Plant; 5) Gypsum will be sourced from Bikaner, Rajasthan. Fuel will be Indian & Imported Coal and Indian & Imported Petcoke, sourced from SECL/Open Market/ E-auction & other Petrochemical Refineries and USA, Indonesia, Saudi Arabia etc. respectively.
- 9.21.10 Water Consumption for the proposed project will be 3000 KLD; which will be sourced from Ground water & Local authorities. No waste water will be discharged from the cement plant. Domestic wastewater generated from Plant will be treated in septic tank via soak pit and domestic wastewater generated from colony is proposed to be treated in

STP and the treated water will be utilized for greenbelt development/ plantation. Wastewater generated from CPP and RO reject will be treated in ETP. Treated water will be reused for landscaping, dust suppression etc.

9.21.11 The proponent has mentioned that there is no court case or violation under EIA Notification to the project or related activity.

Observations of the Committee:

9.21.12 The proposal was considered in the REAC meeting held during 20-22nd February 2019. After detailed deliberations, it was decided that sub-committee comprising of EAC members and Officer concerned with the subject matter will undertake a site visit and thereafter the proposals would be considered by the EAC for grant of ToR.

9.21.13 Accordingly, sub-committee consists of following members along with official of M/s Dalmia Cement has visited the site on 23rd June 2019 and submitted site visit report with site specific issues.

1. Shri Rajendra Prasad Sharma -Member EAC
2. Shri A J Rao - Member EAC
3. Shri Rajshekhar Ratti, - Scientist C, MoEFCC

9.21.14 The sub-committee visited all the four sites proposed by Project Proponent. On comparison of above sites proposed by PP and after extensive walk through survey of the entire area, the subcommittee members have opined that option 4 is the most appropriate site for the proposed plant for the following reasons;

- i. Site is single crop agriculture land without any irrigation facility.
- ii. Site is nearer to railway station and minimum land acquisition would be needed for railway siding, although PP has to lay LS conveyor of 3 km length (longest among all options).
- iii. Only one village is affected that too only land would be acquired. There is no displacement of human habitat from plant area.
- iv. The study area has two village ponds which could be deepened to enhance rainwater harvesting and to improve the availability of water to the villagers.

Recommendations of the Committee

9.21.15 After detailed deliberations, the Committee recommended the project proposal for prescribing following specific ToRs for undertaking detailed EIA and EMP study in addition to the generic ToR enclosed **at Annexure I read with additional ToRs at Annexure-2:**

- i. The plant shall be designed with air cooled condensers
- ii. The plant shall be designed with provision for addition of alternate fuel
- iii. The plant shall be designed for ZLD.
- iv. Scheme for Watershed management in the study area based on detailed Hydro geological study. Total rainwater harvested would be more than the water consumed annually in the plant operations.

- v. Project Proponent shall explore the possibility of avoiding groundwater abstraction and look at possibility of drawing river water by sinking wells on river bed, setting up a pumping station, laying a pipe line to project site etc.
- vi. Detailed skill development plan for local community in;
 - Plant operation and Maintenance trades.
 - Dairy, Poultry, Farming, Mechanic, Health workers, Tailoring and other trades to improve income generation and also for women empowerment.
 - Social Entrepreneur Development Program and Plans.
- vii. Soil testing and for enrichment of soil to improve productivity in the study area.
- viii. Air quality assessment shall be conducted for abnormal, normal and worst case scenarios considering near by habitation, water body, land features etc. Mitigation plan shall be accordingly prepared and incorporated in EMP.
- ix. Action plan for Rainwater harvesting and its monitoring to the tune of 100% of annual water consumption.
- x. Ensure the greenbelt 30-meter-wide along village boundary and incorporate in the plant layout plan.
- xi. Public Hearing to be conducted by the concerned State Pollution Control Board.
- xii. The issues raised during public hearing and commitment of the project proponent on the same along with time bound action plan to implement the commitment and financial allocation thereto should be clearly provided.
- xiii. The project proponent should carry out social impact assessment of the project and furnish the action plan for Corporate Environment Responsibility as per the Ministry's Office Memorandum vide F.No. 22-65/2017-IA.III dated 1/05/2018.

9.22 Installation of Induction Furnace, Rolling Mill & Submerged Arc Furnace for production of Ingots, Billets, 5,00,000 TPA , TMT & long Product: 5,00,000 TPA & Ferro alloys 25,000 TPA by **M/s Lloyds Metals & Energy Limited** at Plot A-1 and A-2, MIDC area Ghugus, Chandrapur , Maharashtra [Online Proposal No. IA/MH/IND/108959/2019 File No. J-13012/123/2007-IAII(I)]– **Prescribing of Terms of Reference – regarding.**

9.22.1 The project proponent submitted an application in the prescribed format along with Form-1 and other reports to the Ministry online on 24th June 2019 vide Online Application No IA/MH/IND/108959/2019.

9.22.2 The existing projects for sponge iron manufacturing plant was accorded environmental clearance vide lr.no. Env (NOC)2005/747/CR.97/D.I dated 28th December 2005, for coal washery environmental clearance was accorded vide lr.no. J-11015/272/2007-IA.II (M) dated 9th April 2008 and for waste Heat Recovery based captive power plant of 25 MW capacity environmental clearance was accorded vide lr.no. J-13012/123/07-IA-II dated 12th October 2009. Consent to Operate was accorded by Maharashtra State pollution Control Board vide lr. no. Format 1.0/BO/CAC-Cell/EIC No. : CH1695-14/CAC-421 validity of CtO is up to 31-12-2019.

- 9.22.3 The proposed unit will be located at Plot A-1 and A-2, MIDC Area, Ghugus, Chandrapur, Maharashtra.
- 9.22.4 Total land leased by MIDC to Lloyds Metals & Energy Limited (LMEL) is 93.52 Ha in which plot no. A-1 is 4.00 Ha & A-2 is 89.52 Ha. 8.56 Ha land is identified for the proposed project. No forestland involved. Of the total area 30.86 ha (33%) land will be developed for green belt development.
- 9.22.5 No national park/wildlife sanctuary/biosphere reserve/tiger reserve/elephant reserve etc. are reported to be located in the core and buffer zone of the project. The area also does not report to form corridor for Schedule-I fauna.
- 9.22.6 Total project cost is Rs. 760 Crore. Proposed employment generation from proposed project will be 750 direct employment and indirect employment.
- 9.22.7 The targeted production capacity of ingots, Billets 5,00,000 TPA, Rolling Mill for hot rolled long products and TMT 5, 00,000 TPA and Submerged Arc furnace to produce Ferro Alloys 25,000 TPA.

Name of unit	Existing Unit	Proposed Unit	Capacity of each Unit	Total Production
Sponge Iron	Sponge Iron	-	4 X100 TPD and 1x500 TPD	3,24,000 MT/Year
Coal Washery	Coal Washery	-	0.21 6 MTPA	0.21 6 MTPA
Electricity Generation	WHRB) +AFBC (for back up)	-	25 MW	25 MW
Ingots/ Billets	-	Induction Furnace	6 X 30 TPH	5,00,000 TPA
Hot rolled long product / TMT	-	Rolling Mills(2 Nos)	-	5,00,000 TPA
Ferro Alloys (Silico Manganese,	-	Submerged Arc Furnace	2X 9MVA	25,000 TPA

- 9.22.8 The power required for the proposed project will be 35 MW which will be sourced from own power plant & MSEDCL.
- 9.22.9 Proposed raw material requirement for project are sponge iron & scrap. LEML is manufacturing 3,24,000 TPA sponge iron at Ghugus plant and proposed plant at Konsari, District Gadchiroli will be manufacture another 72000 TPA. The raw material requirement for Ferro alloy (Ferro-manganese) unit are coal, Manganese ore, coke, carbon paste, Quartz and Dolomite which will be procured from local market and raw material requirement for Silico –manganese unit is Ferro manganese slag.
- 9.22.10 Water Consumption for the proposed project will be 260 KLD. A agreement has been signed with Irrigation Department, Chandrapur for supply of water. The wastewater generated from industrial process and cooling purpose will be 30 KLD which will be treated in settling tank within the premises and treated water will be reused back to the

process. About 11 KLD of domestic wastewater will be treated in Packaged Type STP of 15 KLD capacity and treated water will be used for green belt development.

9.22.11 The proponent has mentioned that there is no court case or violation under EIA Notification to the project or related activity.

9.22.12 Name of Consultant: M/s Pollution Control Ecology Service, Sr No in QCI List: 114

Observations of the Committee:

9.22.13 The Committee noted that the project site is located at Chandrapur, Maharashtra. As per the Order dated 10/07/2019 passed by the Hon'ble National Green Tribunal in Original Application No. 1038/2018, no further industrial activities or expansion shall be allowed with regard to 'red' and 'orange' category units in Chandrapur, Maharashtra till the said areas are brought within the prescribed parameters or till carrying capacity of area is assessed and new units or expansion is found viable having regard to the carrying capacity of the area and environmental norms.

Recommendations of the Committee:

9.22.14 In view of the aforesaid, the Committee deferred the consideration of the project and asked the project proponent to obtain confirmation from CPCB regarding location of the plant site with respect to critically polluted area.

9.23 Expansion of existing DRI 60,000 TPA to 180,000 TPA, & manufacturing 138,700 TPA steel billets in SMS, rolling into 100,000 TPA TMT Rods and adding 15 MW Power generation from waste heat recovery from DRI kiln(2x11+2x22 TPH WHRB) and converting waste dolochar and fine rejected coal(through 1x30 TPH AFBC/CFBC boiler) by **M/s Saluja Steel & Power Pvt. Ltd.**, located At Mouza Mohanpur, PS Mahtodih, District Giridih, **Jharkhand** [Online Proposal No. IA/JH/IND/109296/2019 File No. J-11011/240/2019-IAII(I)]– Prescribing of **Terms of Reference** regarding

9.23.1 M/s. Saluja Steel and Power Private Limited made application vide online proposal no. IA/JH/IND/109296/2019 dated 27/06/2019 along with the application in prescribed format (Form-I), copy of pre-feasibility report and proposed ToRs for undertaking detailed EIA study as per the EIA Notification, 2006 for the project mentioned above. The proposed project activity is listed at Sl. No. 3(a) Metallurgical industries (ferrous & non-ferrous) under Category "A" of the schedule of the EIA Notification, 2006 and appraised at Central Level.

Details submitted by the project proponent

9.23.2 M/s. Saluja Steel and Power Private Limited has proposed for expansion of existing DRI 60,000 TPA to 80,000 TPA, & manufacturing 1,38,700 steel billets in SMS, rolling into 1,00,000 TPA TMT Rods and adding 15 MW Power generation from waste heat recovery from DRI kiln (2x11+2x22 TPH HRB) and converting waste dolochar and fine rejected coal (through 1x30 TPH AFBC/CFBC boiler) at Mouza Mohanpur, PS Mahtodih, District Giridih, Jharkhand.

9.23.3 Name of the EIA consultant: M/s. Pollution and Ecology Control Services, Nagpur [Sr. No. in QCI List: 114, List of Accredited Consultant Organizations (Alphabetically) Rev. 78, July 10, 2019]

Observations of the Committee

9.23.4 The Committee noted that unit configuration and production capacities of various units had not been mentioned in the Form I and Pre-feasibility report. Further, engineering drawing layout is not to the scale and the details sought in the Form I have not been adequately addressed.

9.23.5 The committee noted that EIA report submitted by M/s. Pollution and Ecology Control Services, Nagpur are not up to the mark. Earlier also, EAC has raised concern on the quality of report. EAC, therefore, advised MoEF&CC to refer the matter to QCI/NABET, in case of no improvement from the consultant.

Recommendations of the Committee

9.23.6 In view of the aforesaid, the Committee recommended to return the proposal **in present form.**

9.24 Expansion in existing Steel Manufacturing unit having existing capacity 28,800TPA(96 TPD) of Steel Billets to 75,240 TPA (228 TPD) of Steel Ingots/Billets by replacing existing 2 no's of Induction Furnaces of **M/s Trishala Alloys Pvt. Ltd.**, located at Village Jandiali, Budhewal Road, Near Kohara, Ludhiana, **Punjab.** -[Online Proposal No. IA/PB/IND/109496/2019 File No. J-11011/232/2019-IAII(I)]- **Prescribing of Terms of Reference – regarding**

9.24.1 The project proponent submitted an application in the prescribed format along with Form-1 and other reports to the Ministry online on **29th June 2019** vide Online Application No. **IA/PB/IND/ 109496 /2019**

9.24.2 The existing project was accorded environmental clearance vide letter No. **NA** dated **NA**. Consent to Operate was accorded by Punjab Pollution Control Board vides ltr. No. CTOA/Renewal/LDH1/2018/ 7863486 dated 07/07/2018. Validity of CTO is up to 30.06.2023.

9.24.3 The proposed unit will be located at. Village- Jandiali, Budhewal Road, Near Kohara, Ludhiana, and Punjab.

9.24.4 The land area acquired for the proposed plant is 1.214 Ha. out of which 0 ha. is an agricultural land, 0ha.is grazing land and 0 ha.is others (NA Government Land). No /forestland involved. The entire land has been acquired for the project. Of the total area 0.41 ha (33%) land will be used for green belt development.

9.24.5 The National Park/WL etc. are located at a distance of NA km from the site/No national park/wildlife sanctuary/biosphere reserve/tiger reserve/elephant reserve etc. are reported to be located in the core and buffer zone of the project. The area also does not report to form corridor for Schedule-I fauna.

- 9.24.6 Total project cost is approx. 8.20 Crore rupees. Proposed employment generation from the proposed project will be 150 direct employment and indirect employment.
- 9.24.7 The targeted production capacity of the plant will be 75,240 MTPA. The ore for the plant would be procured from (linkages Open Market). Material transportation will be done through Road. The proposed capacity for different products for new site area as below:

Name of unit	No. of units	Capacity of each Unit	Production Capacity
Induction Furnace	2	1 x12 TPH 1x7 TPH	75,240 MTPA

- 9.24.8 The electricity load of 9600 KVA will be procured from Punjab State Power Corporation Limited, Punjab. M/s Trishala Alloys Pvt Ltd. has also proposed to install 250 KVA DG Sets with existing 100 KVA DG set.
- 9.24.9 Proposed raw material requirement for project is 83,566 MTPA. The requirement would be fulfilled by purchase from the Open Market. HSD Fuel consumption will be mainly for the DG Set.
- 9.24.10 Water Consumption for the proposed project will be 45 KLD (Domestic 12 KLD + Industrial 33KLD) and waste water generation will be 8.4 KLD. Domestic waste water will be treated in Proposed STP 10 KLD and industrial waste water generated will be treated, recirculated and reused within the plant premises after neutralization and addition of makeup water.
- 9.24.11 The proponent has mentioned that there is no court case or violation under EIA Notification to the project or related activity.
- 9.24.12 **Consultant:** Chandigarh Pollution Testing Laboratory- EIA Division, E-126, Sector-73, Phase- VII, Industrial Area, Mohali, Punjab- 160055, Certificate No. NABET/EIA/1619/SA 057, Sr. No. 24, Rev. 78, July 10, 2019.

Observations of the Committee:

- 9.24.13 The Committee noted that the project site is located at Ludhiana, Punjab. As per the Order dated 10/07/2019 passed by the Hon'ble National Green Tribunal in Original Application No. 1038/2018, no further industrial activities or expansion shall be allowed with regard to 'red' and 'orange' category units in Ludhiana, Punjab till the said areas are brought within the prescribed parameters or till carrying capacity of area is assessed and new units or expansion is found viable having regard to the carrying capacity of the area and environmental norms.

Recommendations of the Committee:

- 9.24.14 In view of the aforesaid, the Committee deferred the consideration of the project and asked the project proponent to obtain confirmation from CPCB regarding location of the plant site with respect to CEPI area.

- 9.25** Proposed Expansion of M.S Billets production from 30,000 TPA to 1,22,400 TPA by **M/s Grazia Tulio Lifestile Private Limited** located at Plot no A-11, Deori Industrial Area,

M.I.D.C, Dist. Gondia, **Maharashtra** [Online Proposal No. IA/MH/IND/109828/2019 File No. J-11011/235/2019-IAII(I)]– **Prescribing of Terms of Reference regarding**

- 9.25.1 The project proponent submitted an application in the prescribed format along with Form-1 and other reports to the Ministry online on 2nd July 2019 vide Online Application No. IA/MH/IND/109828/2019.
- 9.25.2 Consent to Establish was accorded by Maharashtra State pollution Control Board vide Ir. no. BO/JD (APC)/UAN No. MPCB-CONSENT-42259/R/CC-1331 dated 27/03/2018 validity of Consent to Establish is up to Commissioning of the unit or 5 Years.
- 9.25.3 The proposed expansion will be carried out at A-11, Deori Industrial Area, MIDC, Taluka: Deori, District: Deori, State: Maharashtra.
- 9.25.4 The land in possession is 1 Ha which is industrial land. No/forestland involved. Of the total area 0.33 ha (33%) land will be used for green belt development.
- 9.25.5 According to the Notification S.O. 612(E) dated 25th February 2016 Distance from Eco-Sensitive Zone around Nagzira Wildlife Sanctuary, New Nagzira Wildlife Sanctuary, Koka Wildlife Sanctuary, Navegaon Wildlife Sanctuary and Navegaon National Park: 0.2 km. Interstate boundary of Maharashtra Chhattisgarh is at a distance of 7.5 kms (E).
- 9.25.6 Total project cost is Rs. 40Crore. Proposed employment generation from proposed project will be 100 direct employment and indirect employment.
- 9.25.7 The targeted production capacity of M.S. Billets after expansion will be 1,22,400 TPA. The scrap & sponge iron for the plant will be procured from various vendors. The raw material transportation will be carried by Road.

Name of unit	Existing Capacity of Induction Furnace	Existing Production in TPA	Capacity of Proposed Induction Furnace	Proposed Production in TPA	Total after expansion
Induction Furnace	1 x 12 TPH	30000	2 x 20 TPH	92,400	1 x 12 TPH+ 2 x 20 TPH 1,22,400 TPA

- 9.25.8 The electricity load of 10000KVA will be procured from State Electricity Board.
- 9.25.9 Proposed raw material requirement for project are sponge iron & scrap. The requirement will be fulfilled by local vendors.
- 9.25.10 Water Consumption for the proposed project will be 40 KLD and waste water generation will be 10 KLD and about 2 KLD of domestic waste water will be treated in Packaged Type STP and industrial waste water generated will be treated in settling tank and reused in process.

9.25.11 The proponent has mentioned that there is no court case or violation under EIA Notification to the project or related activity.

9.25.12 EIA Consultant: Pollution and Ecology Control Services, Sr. No. in QCI List: 114

Observations of the Committee:

9.25.13 The Committee observed deficiency in filled in information in Form -1. The committee asked the PP to submit the submit updated Form -1.

Recommendations of the Committee:

9.25.14 After detailed deliberations, the Committee recommended the project proposal with following specific ToRs for undertaking detailed EIA and EMP study in addition to the generic ToR enclosed at **Annexure I read with additional ToRs at Annexure-2:**

- i. PP shall obtain the recommendation from National Board for Wildlife.
- ii. Public Hearing to be conducted by the concerned State Pollution Control Board.
- iii. The issues raised during public hearing and commitment of the project proponent on the same along with time bound action plan to implement the commitment and financial allocation thereto should be clearly provided.
- iv. The project proponent should carry out social impact assessment of the project and furnish the action plan for Corporate Environment Responsibility as per the Ministry's Office Memorandum vide F.No. 22-65/2017-IA.III dated 1/05/2018.
- v. Action plan for Rainwater harvesting and its monitoring to the tune of 100% of annual water consumption.

9.26 Proposed Greenfield Project Involving Sponge Iron Kilns, Induction Furnace, Rolling Mills, Captive Power Plant (AFBC +WHRB), Ferro Alloys Plant and Fly Ash Brick Manufacturing of M/s. Gravity Sponge and Power Private Limited located at Village Champa, Tahsil Tilda, District Raipur, Chhattisgarh. [Online Proposal No. IA/CG/IND/107593/2019, File No. J-11011/---/2019-IAII(I)] - **Prescribing of Terms of Reference – regarding**

9.26.1 **M/s. Gravity Sponge and Power Private Limited** has made an application vide online proposal no. IA/CG/IND/107593/2019 dated 10/07/2019 along with the application in prescribed format (Form-I), copy of pre-feasibility report and proposed ToRs for undertaking detailed EIA study as per the EIA Notification, 2006 for the project mentioned above. The proposed project activity is listed at Sl. No. 3(a) Metallurgical industries (ferrous & non-ferrous) under Category "A" of the schedule of the EIA Notification, 2006 and appraised at Central Level.

Details submitted by the project proponent

9.26.2 M/s. Gravity Sponge and Power Private Limited proposes the implementation of Greenfield facilities in phased manner for production of Sponge Iron (315000 TPA) through coal based DRI Kilns, MS Billet (315000 TPA), Steel Rerolled products such as wires rods, etc. (187630 TPA) through Hot Charging and rerolled structural steel

products (94622 TPA) through Billet Reheating Furnace; Ferro- Alloys (31920 TPA) or Pig Iron (63840 TPA) through Submerged Arc Furnace Process, Fly Ash products such as Fly Ash Bricks (122500 TPA) along with captive power generation plant comprising of Waste Heat Recovery Boiler(WHRB) of capacity 20 MW and Atmospheric Fluidized Bed Combustion (AFBC) of capacity 12 MW. The project proponent submitted an application in the prescribed format along with Form – I and other reports to the ministry online on 10 Jul 2019 vide Online Application No. IA/CG/IND/107593/2019.

- 9.26.3 The proposed unit will be located at Village: Champa, Tehsil: Tilda, District: Raipur State: Chhattisgarh –493332. The registered office is situated at G-5, Ground Floor, 1 Crooked Lane, Kolkata – 700069.
- 9.26.4 The land area required for the proposed plant is 20.69 Ha. out of which 6.91 Ha. will be developed as green belt. No forest land is involved. Out of the total land area i.e. 20.69 Ha. 4.14 Ha. land will be under shed, Road and Paved area will be 2.07Ha., Green belt area will be 6.91 Ha. and remaining open area will be 7.57 Ha.
- 9.26.5 Bilari Ghughua Reserved Forest is situated at 9.1 Km (WNW) from the project site. The area also does not report to form corridor for Schedule-I fauna.
- 9.26.6 Total project cost is approx. Rs. 35206 lakhs out of which 2% (691 lakhs) will be spent as CER expenses; the CER fund will be spent along with implementation in phased manner. Direct employment is 969 out of which administrative staff is 91 and 868 are production staffs.
- 9.26.7 The targeted production capacity of Sponge Iron is 315000 TPA, MS Billet is 315000 TPA, Steel Rerolled products such as wires rods, etc. is 187630 TPA and rerolled structural steel products is 94622 TPA; Ferro- Alloys is 31920 TPA or Pig Iron is 63840 TPA, Fly Ash products such as Fly Ash Bricks is 122500 TPA along with captive power generation plant comprising of Waste Heat Recovery Boiler (WHRB) of capacity 20 MW and Atmospheric Fluidized Bed Combustion (AFBC) of capacity 12 MW. The raw materials like Iron ore, coal, limestone, dolomite, refractory materials, sponge iron, pig iron, aluminum, manganese ore, quartz, etc. will be done through covered trucks from local markets or mines, as per requirement.
- 9.26.8 The details of facilities to be implemented are as below:

S. No.	Product	Facility in First Phase		Facility in Second Phase		Final	
		Facility	Capacity	Facility	Capacity	Facility	Capacity
1	Sponge Iron	DRI kiln 100 TPD X 2 Nos.	70000	DRI kiln 350 TPD X 2 Nos.	245000	DRI Kiln 100 TPA X2 Nos. and 350 TPD X 2 Nos	315000
2	MS Billet	Induction Furnace, 15 Tons X 4 Nos LRF, CCM	157500	Induction Furnace, 15 Tons X 4 Nos LRF, CCM	157500	Induction Furnace, 15 Tons X 8 Nos LRF, CCM	315000

S. No.	Product	Facility in First Phase		Facility in Second Phase		Final	
		Facility	Capacity	Facility	Capacity	Facility	Capacity
And/ Or							
3	Rerolled Steel product (Wire Rod etc)	Hot Charging Rolling Mill	37630	-	150000	Hot Charging Rolling Mill	187630
	Rerolled Steel product (Rerolled Structural Steel etc.)	Billet Reheating Furnace	94622	-	-	Billet Reheating Furnace	94622
4.	Ferro Alloys	Submerged Arc furnace	31920	-	-	Submerged Arc furnace	31920
Or							
	Pig Iron	Submerged Arc furnace	63840	-	-	Submerged Arc furnace	63840
5	Captive Power	WHRB	5 MW	WHRB	15 MW	WHRB	20 MW
		AFBC	6 MW	AFBC	6 MW	AFBC	12 MW
6	Fly Ash Bricks	Fly Ash Brick Making	50000	Fly Ash Brick Making	72500	Ash Brick Making	122500

9.26.9 Total power requirement will be 46.26 MW out of which 32 MW will be met through captive power plant and 14.26 MW will be sourced through State Grid (CSPDCL). In addition to these total 3300 kVA DG sets are proposed for emergency backup.

9.26.10 The total raw material requirement for Sponge Iron Plant will be 915575 TPA, Induction Furnace and Rerolling Mill will be 375563 TPA along with FO 150 KLA, Ferro Alloys Plant 104221 TPA and Captive Power Plant will be 129376 TPA. Raw material requirement will be fulfilled by nearby mines and open markets within 100 Km radius. Fuel consumption will be mainly source from local sources.

9.26.11 Estimated water requirement will be 1230 KLD, out of which 68 KLD will be used for domestic purposes. It is proposed to meet this water requirement through combination of 120000 KL capacity rain water collection reservoir to meet water requirement of 97 days. During the rainy season, about 75 days, it is proposed to source the water from rain water collection tank of 25000 KL, remaining 158 days water will be sourced from ground water. A reservoir constructed by government for irrigation facilities namely "Manpur Reservoir" in the EES direction of proposed site. It will also be explored for possibilities to draw water from the said reservoir with due permission to further reduce the ground water requirement. The waste water generated from reverse osmosis system will be used in Slag quenching, dust suppression. Domestic waste water will be treated in STP and treated water will be used for green belt irrigation and dust suppression.

- 9.26.12 The proponent has mentioned that there is no court case or violation under EIA Notification to the project or related activity.
- 9.26.13 Name of Environmental Consultant: Anacon Laboratories Pvt. Ltd., Nagpur Accredited in Metallurgical industries in Category A Sr. No. 10 in QCI-NABET July' 2019 List. Accreditation Certificate No.: NABET/EIA/1619/RA 0059 dtd. 29th June 2017 Valid till 01st Oct. 2019

Observations of the Committee:

- 9.26.14 The Committee noted that details regarding underground works and anticipated emissions from the project activity have not been explicitly mentioned in the Form –I. In view of this, the Committee asked the project proponent to submit the revised Form I. Accordingly, the project proponent submitted the revised Form I during the meeting.

Recommendations of the Committee:

- 9.26.15 After detailed deliberations, the Committee recommended the project proposal with following specific ToRs for undertaking detailed EIA and EMP study in addition to the generic ToRs enclosed at **Annexure-1 read with additional ToRs at Annexure-2:**
- i. Details regarding optimization of plant configuration by considering scale of economy, specific energy and water consumption shall be furnished.
 - ii. Unit shall install bag house for control of emissions below 30 mg/Nm³.
 - iii. Permission for water drawl shall be furnished.
 - iv. Action plan for transportation of materials by Rail shall be submitted.
- 9.27 Expansion of existing steel plant to Integrated Steel Plant through installation of 1800 TPD (3x600 TPD) DRI kilns along with Beneficiation Plant for Iron ore (1X0.6 MTPA), Pellet Plant (1x0.6 MTPA), Steel Melting Shop (2x25 T + 4x15 T Induction Furnaces) with matching LRF & CCM, Rolling Mill (0.35 MTPA), Ferro alloy Plant (4x16.5 MVA), Briquette plant for Chrome Ore (1x30 TPH), Oxygen plant (100 TPD) and 63 MW (38 MW WHRB based + 25 MW AFBC based) Captive Power Plant **M/s Nilachal Iron & Power Limited** at Ratanpur-Kandra Village, Gamharia Block, District Saraikela-Kharsawan, **Jharkhand** [Online Proposal No. IA/JH/IND/111776/2019; File No. J-11011/662/2008-IA.II(I)] – **Prescribing of Terms of Reference.**

M/s. Nilachal Iron and Power Limited made application vide online proposal no. IA/JH/IND/111776/2019 dated 19/07/2019 along with the application in prescribed format (Form-I), copy of pre-feasibility report and proposed ToRs for undertaking detailed EIA study as per the EIA Notification, 2006 for the project mentioned above. The proposed project activity is listed at Sl. No. 3(a) Metallurgical industries (ferrous & non-ferrous) under Category “A” of the schedule of the EIA Notification, 2006 and appraised at Central Level.

Details submitted by the project proponent

- 9.27.1 M/s. Nilachal Iron & Power Limited proposes an expansion of existing steel plant to Integrated Steel Plant through installation of 1800 TPD (3x600 TPD) DRI kilns along

with Beneficiation Plant for Iron ore (1X0.6 MTPA), Pellet Plant (1x0.6 MTPA), Steel Melting Shop (2x25 T + 4x15 T Induction Furnaces) with matching LRF & CCM, Rolling Mill (0.35 MTPA), Ferro alloy Plant (4x16.5 MVA), Briquette plant for Chrome Ore (1x30 TPH), Oxygen plant (100 TPD) and 63 MW (38 MW WHRB based + 25 MW AFBC based) Captive Power Plant on the available land within the existing plant premises, comprising of total 24.63 hectares (60.87 acres) as well on the additional land of total 56.3 hectares (139.13 acres) adjoining the existing plant premises.

9.27.2 The existing and the proposed unit configuration along with the production capacities is given as below:

Unit	Existing Unit under Operation	Unit under Implementation	Proposed Units Capacity	Total Capacity and Products
Beneficiation Plant	-		6,00,000 TPA	(1x0.6 MTPA) 6,00,000 TPA Concentrated Iron Ore
Pelletization Plant	-		6,00,000 TPA (Module: 1x6,00,000 TPA)	(1x0.6 MTPA) 6,00,000 TPA Pellets
Sponge Iron Plant	550 TPD (2x100 TPD, 1x350 TPD)		1800 TPD (3x600 TPD)	2350 TPD Sponge Iron (2x100 TPD, 1x350 TPD, 3x600 TPD)
Steel Melting Shop (SMS) with matching LRF & CCM	-		Induction Furnaces (2x25 T + 4x15 T)	Induction Furnaces (2x25 T + 4x15 T) 3,63,000 TPA Liquid Steel (3,59,000 TPA Billets)
Rolling Mill (Liquid Steel)	-		3,50,000 TPA	3,50,000 TPA Rods, Bars, Light Structural
Ferro Alloy Plant	-		Submerged Arc Furnaces (SAF) - 4 x 16.5 MVA	(SAF) - 4 x 16.5 MVA

Unit	Existing Unit under Operation	Unit under Implementation	Proposed Units Capacity	Total Capacity and Products
				1,25,000 TPA Ferro Alloys (35,160 TPA Ferro-Chrome + 14,367 TPA Ferro-Silicon + 43,633 TPA Ferro-Manganese + 31,840 TPA Silico-Manganese)
Chrome Ore Briquette Plant	-		30 TPH	30 TPH
Oxygen Plant	-		100 TPD	100 TPD Oxygen
Captive Power Plant	-	12 MW WHRB based	63 MW (38 MW WHRB based + 25 MW AFBC based)	75 MW Power

9.27.3 Name of the consultant: M/s. Envirotech East Private Limited [S.No. 52, List of Accredited Consultant Organizations (Alphabetically) Rev. 78, July 10, 2019].

Observations of the Committee:

9.27.4 The Committee noted that the project site is located at Ratanpur-Kandra Village, Gamharia Block, District Saraikela-Kharsawan, Jharkhand. As per the Order dated 10/07/2019 passed by the Hon'ble National Green Tribunal in Original Application No. 1038/2018, no further industrial activities or expansion shall be allowed with regard to 'red' and 'orange' category units in Saraikela, Jharkhand [Adityapur & Gamharia] till the said areas are brought within the prescribed parameters or till carrying capacity of area is assessed and new units or expansion is found viable having regard to the carrying capacity of the area and environmental norms.

9.27.5 The committee noted that EIA report submitted by M/s. Envirotech East Private Limited are not up to the mark. Earlier also, EAC has raised concern on the quality of report.

EAC, therefore, advised MoEF&CC to refer the matter to QCI/NABET, in case of no improvement from the consultant.

Recommendations of the Committee:

9.27.6 In view of the aforesaid, the Committee deferred the consideration of the project and asked the project proponent to obtain confirmation from CPCB regarding location of the plant site with respect to CEPI area.

9.28 Expansion of Production Capacity From 29,500 TPA To 1,00,800 TPA Billets by replacement of Existing 2x3.5 MT/Heat Induction Furnaces With 2x12 MT/Heat Induction Furnaces, With LRF, CCM, And Modification of Rolling Mill by M/s Sharu Industries Pvt. Ltd. At Village Niche Mangli, Adjoining Phase-VII, Focal Point, Ludhiana East, Ludhiana, Punjab-[Online Proposal No. IA/RJ/IND/111984/2019, File No. J-11011/242/2019-IAII(I)]- Prescribing of Terms of Reference – regarding

9.28.1 The project proponent submitted an application in the prescribed format along with Form-1 and other reports to the Ministry online on **22nd July 2019** vide Online Application No. **IA/PB/IND/ 111984/2019**.

9.28.2 Consent to Operate was accorded by Punjab Pollution Control Board vides ltr. No. CTOA/Varied/LDH4/2018/ 7709474 dated 05/07/2018. Validity of CTO is up to 30.06.2019 and renewal of CTO also applied to PPCB.

9.28.3 The proposed unit will be located at Village Niche Mangli, Adjoining Phase-VII, Focal Point, Ludhiana East, Ludhiana, Punjab.

9.28.4 The land area acquired for the proposed plant is 2.15 Ha. No /forestland involved. The entire land has been acquired for the project. Of the total area 0.072 ha (33%) land will be used for green belt development.

9.28.5 The National Park/WL etc. are located at a distance of NA km from the site/No national park/wildlife sanctuary/biosphere reserve/tiger reserve/elephant reserve etc. are reported to be located in the core and buffer zone of the project. The area also does not report to form corridor for Schedule-I fauna.

9.28.6 Total project cost is approx. Rs. 29.18 Crore rupees. Proposed employment generation from the proposed project will be 315 direct employment and indirect employment.

9.28.7 The targeted production capacity of the plant will be 1,00,800 MTPA of Billets and 78,000 MTPA of Round/Flat/Patra. The ore for the plant would be procured from (linkages Open Market). Material transportation will be done through Road. The proposed capacity for different products for site area as below:

Name of unit	No. of units	Capacity of each Unit	Production Capacity
Induction Furnace	2	12 MT/heat	75,240 MTPA
Rollin Mill	1	20 TPH	78,000 MTPA
Reheating Furnace	2	10 TPH	---
CCM	1	2 strand	

- 9.28.8 The electricity load of 26505 KW will be procured from Punjab State Power Corporation Limited, Punjab. M/s Sharu Industries Pvt. Ltd. has also proposed to install 400 KVA & 65 KVA DG Sets.
- 9.28.9 Proposed raw material requirement for project is 1,10,880 MTPA. The requirement would be fulfilled by purchase from the Open Market. HSD Fuel consumption will be mainly for the DG Set.
- 9.28.10 Water Consumption for the proposed project will be 37 KLD (Domestic 15 KLD + Industrial 22 KLD) and waste water generation will be 10.5 KLD. Domestic waste water will be treated in Proposed STP 15 KLD and industrial waste water generated will be treated, recirculated and reused within the plant premises after neutralization and addition of makeup water.
- 9.28.11 The proponent has mentioned that there is no court case or violation under EIA Notification to the project or related activity.
- 9.28.12 **Consultant:** Chandigarh Pollution Testing Laboratory- EIA Division, E-126, Sector-73, Phase- VII, Industrial Area, Mohali, Punjab- 160055, Certificate No. NABET/EIA/1619/SA 057, Sr. No. 24, Rev. 78, July 10, 2019

Observations of the Committee:

- 9.28.13 The Committee observed deficiency in filled in information in Form -1. The committee asked the PP to submit the submit updated Form -1.

Observations of the Committee:

- 9.28.14 The Committee noted that the project site is located at Ludhiana, Punjab. As per the Order dated 10/07/2019 passed by the Hon'ble National Green Tribunal in Original Application No. 1038/2018, no further industrial activities or expansion shall be allowed with regard to 'red' and 'orange' category units in Ludhiana, Punjab till the said areas are brought within the prescribed parameters or till carrying capacity of area is assessed and new units or expansion is found viable having regard to the carrying capacity of the area and environmental norms.

Recommendations of the Committee:

- 9.28.15 In view of the aforesaid, the Committee deferred the consideration of the project and asked the project proponent to obtain confirmation from CPCB regarding location of the plant site with respect to CEPI area.
- 9.29 Expansion of existing Steel Plant by installation of Sponge Iron Plant with 1x350 TPD + 1x500 TPD DRI Kilns, 4x25 T Induction Furnaces, 0.6 MTPA Iron Ore Beneficiation & 0.6 MTPA Pelletization Plant & 40 MW capacity Captive Power Plant along with the product mix change of existing 2x7 MVA Submerged Arc furnaces by **M/s. Jai Balaji Industries Limited (Unit- I)** located at G-1, Mangalpur Industrial Complex, P.O.- Baktarnagar, P.S. Raniganj, District – Paschim Burdwan, **West Bengal** Online Proposal

No. IA/WB/IND/111990/2019; File No. J-11011/290/2018-IA II (I). – **Prescribing of Terms of Reference.**

9.29.1 M/s. Jai Balaji Industries Limited made application vide online proposal no. IA/WB/IND/111990/2019 dated 22/07/2019 along with the application in prescribed format (Form-I), copy of pre-feasibility report and proposed ToRs for undertaking detailed EIA study as per the EIA Notification, 2006 for the project mentioned above. The proposed project activity is listed at Sl. No. 3(a) Metallurgical Industries under Category “A” of the schedule of the EIA Notification, 2006 and appraised at Central Level.

Details submitted by the project proponent

9.29.2 **M/s. Jai Balaji Industries Limited (Unit- I)** proposes an expansion of existing Steel Plant by installation of Sponge Iron Plant with 1x350 TPD + 1+500 TPD DRI Kilns, 4x25 T Induction Furnaces, 0.6 MTPA Iron Ore Beneficiation & 0.6 MTPA Pelletization Plant & 40 MW capacity Captive Power Plant along with the product mix change of existing 2x7 MVA Submerged Arc furnaces within the existing plant premises at G-1, Mangalpur Industrial Complex, P.O.-Baktarnagar, P.S. Raniganj, District – Paschim Burdwan, West Bengal.

9.29.3 The existing and proposed unit configuration along with its production capacity is given as below:

S. N.	Facilities	Existing Capacity (Having NOC)	Proposed Capacity	Ultimate Capacity
1.	DRI Plant	*7 X 50 TPD or 1,05,000 TPA	1X350 TPD + 1X500 TPD or 2,80,500 TPA	1X350 TPD + 1X500 TPD or 2,80,500 TPA (*The existing 7X50 TPD shall be phased out after the implementation of the proposed project)
2.	Coal Washery	2,16,000 TPA (1x50 TPH)		2,16,000 TPA (1x50 TPH)
3.	Iron ore Beneficiation Plant	-	6,00,000 TPA	6,00,000 TPA
4.	Iron ore Pellet Plant	-	6,00,000 TPA	6,00,000 TPA
5	Steel Melting Shop (Induction Furnace)	-	3,30,000 TPA (4 X 25 MT)	3,30,000 TPA (4 X 25 MT)

6.	Ferro – Alloys Plant	2 X 7 MVA SAFs Ferro-Manganese – 15,576 TPA Silico Manganese – 14,580 TPA Total 30,156 TPA	Change of Product-Mix (Ferro-Chrome inclusion) <u>Keeping the plant configuration unchanged</u>	Either Ferro Manganese - 30,156 TPA (capacity optimized) or Ferro Chrome – 24,000 TPA (capacity optimized) or Silico-chrome 15,840 TPA (capacity optimized) or Ferro-Silicon – 11,220 TPA or Silico Manganese- 29,160 TPA Total Ferro-Alloys production will never cross 30,156 TPA.
7.	Captive Power Plant	18.3 MW (8.3 MW WHRB* + 10 MW AFBC)	40 MW (20 MW WHRB + 20 MW AFBC)	50 MW [20 MW WHRB + 30 MW (10 MW existing + 20 MW proposed) AFBC] (The existing 8.3 MW WHRB shall be phased out after the implementation of the proposed project)

9.29.4 The statutory permissions obtained for the existing unit is furnished as below:

Sr. No.	Application Date	Date of Issue	Obtained Certificate Name	Reference Number	Name of Proposed/ Expansion Units	Obtained from
1	19-8-1999	08-12-1999	No Objection Certificate (NOC)	Memo No. 2174-51 / WPB-NOC/40/99	<ul style="list-style-type: none"> 1st Rotary Kiln - Sponge Iron – 50 MT/Day & By Product – 15 MT/Day (Total Fixed Capital Investment: Rs. 484.59 Lacs.) 	West Bengal Pollution Control Board

MoM of 9th meeting of the Re-constituted EAC (Industry-I) held during 30-31st July, 2019

Sr. No.	Application Date	Date of Issue	Obtained Certificate Name	Reference Number	Name of Proposed/ Expansion Units	Obtained from
2	07-03-2001	20-04-2001	Consent to Establish (NOC) for Expansion Unit	Memo No. 218/2N-2184/2001	<ul style="list-style-type: none"> • 2nd Rotary Kiln – Additional Sponge Iron - 50 MT/Day (Total Fixed Capital Investment: Rs. 310.52 Lacs.) 	West Bengal Pollution Control Board
3	16-07-2001	27-07-2001	Consent to Establish (NOC)	Memo No. 626/2N-2328/2001	<ul style="list-style-type: none"> • 3rd & 4th Rotary Kiln - Sponge Iron – 100 MT/Day & By Product-Coalchar – 15 MT/Day (Total Fixed Capital Investment: Rs. 854.60 Lacs.) 	West Bengal Pollution Control Board
4	20-12-2001	29-01-2002	Consent to Establish (NOC) for Expansion Unit	Memo No. 1126-2N-2517/2001	<ul style="list-style-type: none"> • 5th & 6th Rotary Kiln - Sponge Iron – 100 MT/Day & By Product-Coalchar – 15 MT/Day (Total Fixed Capital Investment: Rs. 498 Lacs.) 	West Bengal Pollution Control Board
5	19-03-2003	21-10-2003	Consent to Establish (NOC)	Memo No. 3458-2N-448/2003	<ul style="list-style-type: none"> • 7th Rotary Kiln – Sponge Iron - 1500 MT/Month & By Product-Coalchar – 450 Kgs/Month • (Total Fixed Capital Investment: Rs. 293.92 Lacs.) 	West Bengal Pollution Control Board
6	02-07-2003	24-07-2003	Consent to Establish (NOC) for Existing Unit	Memo No. 3122-2N-133/2003	<ul style="list-style-type: none"> • 12 MW Captive Power Plant (Total Fixed Capital Investment: Rs. 4600 Lacs.) 	West Bengal Pollution Control Board
7	05-10-2004	11-10-2004	Consent to Establish (NOC) for Expansion Unit	Memo No. 9420-2N-579/2003	<ul style="list-style-type: none"> • Ferro Manganese – 1298 Ton/Month • Silico Manganese – 1215 Ton/Month • M.S. Ingot/Billet – 19800 Ton/Month, and • Coal washery- Fresh Coal – 18000 Ton/Month (Total Fixed Capital Investment: Rs. 1634.80 Lacs.) 	West Bengal Pollution Control Board

Sr. No.	Application Date	Date of Issue	Obtained Certificate Name	Reference Number	Name of Proposed/ Expansion Units	Obtained from
8	26-08-2008	11-11-2008	Consent to Establish (NOC) for change in ownership of the industry followed by change in name and style of the industry	Memo No. 32-WPBA/RED (Bwn)/Cont. (332)/02	--	West Bengal Pollution Control Board
9	09-01-2009	11-02-2009	Consent to Establish (NOC) for Expansion Unit	Memo No. 84-2N-75/2008(E)	<ul style="list-style-type: none"> • One no. 30 TPH AFBC Boiler for 6.3 MW additional Power generation (The Gross Capital Investment: Rs. 1500 Lacs.) 	West Bengal Pollution Control Board
10	--	05-05-2017	Valid Consent to Operate (CTO), valid upto 2022	Consent Letter No. CO107798 Memo No. 546-WPBA/RED (Bwn)/Cont (332)/2002	<ul style="list-style-type: none"> • Ferro Manganese – 1298 MT/Month • Power Generation – 9.59 MU/Month • Silico Manganese – 1215 MT/Month • Sponge Iron – 9040 MT/Month • Washed Coal – 17000 MT/Month 	West Bengal Pollution Control Board

9.29.5 The proposed unit is located at G-1, Mangalpur Industrial Complex, P.O.-Baktarnagar, P.S. Raniganj, District – Paschim Burdwan, West Bengal. The geographical co-ordinates are Latitude - 23°36'10.75"N to 23°36'43.57"N & Longitude - 87°8'49.32"E to 87°9'11.10" with Above Mean Sea Level (AMSL) of 88 m to 107 m (290 ft to 350 ft).

9.29.6 The proposed expansion project will be installed on the available land within the existing plant premises, comprising total 34.8 hectares (86 acres) of land. No forest land involved. The entire land has been acquired for the project. Of the total area 11.5 hectares (33.72%) land will be used for green belt development.

9.29.7 No national park / wildlife sanctuary / biosphere reserve / tiger reserve / elephant reserve etc. are reported to be located in the core and buffer zone of the project. The area also does not report to form corridor for Schedule-I fauna.

9.29.8 Total project cost is approx. Rs. 392 Crores. Manpower, to the tune of 900 persons will be required for the plant operations.

9.29.9 The targeted production capacity of the DRI Plant (1x350 TPD + 1x500 TPD) is 2,80,500 TPA, Coal Washery (1x50 TPH) is 2,16,000 TPA, Iron ore Beneficiation Plant is 6,00,000 TPA, Iron ore Pellet Plant is 6,00,000 TPA, Induction furnaces (4x25 T) is 3,96,000 TPA,

Ferro Alloy Plant is 30,156 TPA & 50 MW (20 MW WHRB + 30 MW AFBC) capacity Captive Power Plant, utilizing waste heat & dolochar from existing & proposed Sponge Iron Plants). The raw material transportation will be done through Rail and road.

- 9.29.10 The estimated power requirement of the proposed expansion project is about 51.5 MW. The above power requirement for the plant is proposed to be met from proposed 40 MW captive power plant and from DVC / India Power.
- 9.29.11 Proposed raw materials and fuel requirement for major products of the project are as follows.

Sl. No	Prime Raw Materials	Annual Requirement (In Tpa)			Source
		Existing	Proposed	Ultimate	
Coal Washery					
1.	Rom Coal	2,16,000	-	2,16,000	Raniganj Coalfields
Iron Ore Beneficiation Plant					
1.	Iron Ore Fines	-	9,20,000	9,20,000	Barbil
Iron Ore Pellet Plant					
1.	Iron Ore Conc entrate	-	6,00,000	6,00,000	In-House
Dri Plant					
1.	Pellet	-	4,40,000	4,40,000	In House Pellet Plant
2.	Washed Coal	-	1,08,000	2,16,000	In House Coal Wasehry
3.	Non-Coking Coal	-	2,28,600	2,28,600	Raniganj Coalfields
4.	Dolomite	-	1640	1640	Mines In Bhutan
Captive Power Plant					
1.	Dolochar	-	68,000	68,000	In House
2.	Middlings / Re jects	-	92,000	92,000	In House
3.	Coal	-	65,600	65,600	Market
Induction Furnace					
1.	Sponge Iron / Pellet	-	2,80,500	2,80,500	In House
2.	Pig Iron	-	75,000	75,000	Market
3.	Ferro Alloys	-	4,750	4,750	In House
Ferro-Alloys					

Ferro-Manganese					
1.	Manganese Ore	35,825	69,360	69,360	Market
2.	Coke	8,175	15,828	15,828	In House Coke Oven
3.	Dolomite	3892	7,536	7,536	Mines In Bhutan
Silico-Manganese					
1.	Manganese Ore	25,512	51,024	51,024	Market
2.	Quartz	2,190	4,380	4,380	Mines In Bhutan
3.	Coke	9,480	18,960	18,960	In House Coke Oven
4.	Dolomite	2,190	4,380	4,380	Mines In Bhutan
5.	Fe-Mn Slag	7,296	14,592	14,592	Market
Ferro-Chrome					
1.	Briquette	-	48,000	48,000	In-House
2.	Chrome Ore	-	9,600	9,600	Mines In Orissa
3.	Coke	-	12,960	12,960	In-House
4.	Quartz	-	4,800	4,800	Mines In Bhutan
Ferro-Silicon					
1.	Quartz	-	20,200	20,200	Mines In Bhutan
2.	Charcoal	-	12,345	12,345	Market
3.	Coke	-	4,000	4,000	In House Coke Oven
4.	Mill Scale	-	4,500	4,500	Market
Silico-Chrome					
1.	Cr Chips	-	8,560	8,560	Mines In Orissa
2.	Coke	-	5,545	5,545	In-House
3.	Charcoal	-	9,500	9,500	Market
4.	Quartz	-	20,592	20,592	Mines In Bhutan

9.29.12 The total requirement of make-up water to meet process make-up and drinking needs of the proposed new facilities will be around 2120 m³/day including 100 m³/day for drinking, greenery and sanitary purpose, to be sourced from Asansol Durgapur Development Authority (ADDA) water supply facilities. Domestic waste water will be treated in septic tank-soak pit system and industrial waste water generated will be treated in water treatment facility and reused completely.

9.29.13 The proponent has mentioned that there is no court case or violation under EIA Notification to the project or related activity.

9.29.14 Name of the consultant: M/s. Envirotech East Private Limited [S.No. 52, List of Accredited Consultant Organizations (Alphabetically) Rev. 78, July 10, 2019].

Observations of the Committee:

9.29.15 The Committee noted that details regarding underground works and anticipated emissions from the project activity have not been explicitly mentioned in the Form –I. In view of this, the Committee asked the project proponent to submit the revised Form I. Accordingly, the project proponent submitted the revised Form I.

Recommendations of the Committee:

9.29.16 After detailed deliberations, the Committee recommended the project proposal with following specific ToRs for undertaking detailed EIA and EMP study in addition to the generic ToRs enclosed at **Annexure-1 read with additional ToRs at Annexure-2:**

- i. Fourth hole extraction shall be provided.
- ii. Unit shall install bag house for control of emissions below 30 mg/Nm³.
- iii. Permission for water drawl shall be furnished.
- iv. Action plan for 100% utilization of solid waste shall be submitted.
- v. Scheme for rain water harvesting shall be furnished.
- vi. Action plan for maximizing the use of renewal energy shall be submitted.
- vii. Action plan for transportation of materials by Rail shall be submitted

9.30 Proposed 45,000 TPA M.S. Billets; 76,200 TPA TMT Bars; Total 76,200 TPA M.S. Billets; 76,200 TPA TMT Bars by **M/s. New Steel Trading Private Limited** at Survey No. 5/1 (pt), 6/3, 4, 5, 13 and 46/1, Village – Vasuri (Kd), Tal – Wada, District – Palghar, **Maharashtra**–Reconsideration of Prescribing **Terms of Reference**.

Consideration of the proposal was deferred as the Project Proponent did not attend the meeting. The proposal may be considered subject to satisfactory explanation of the reasons of absence by the applicant.

9.31 Capacity expansion of Integrated Steel Plant from 5.6 MTPA to 12.8 MTPA of **M/s.Tata Steel BSL Limited** located at Village Meramandali District, Dhenkanal, Odisha-[Online Proposal No. IA/OR/IND/108024/2019, File No. J-11011/829/2008-IAII(I)]- Extension of Validity of **ToR** regarding.

9.31.1 M/s. TATA Steel BSL Limited (Formerly M/s. Bhushan Steel Limited) has made online application vide proposal no. IA/OR/IND/108024/2019 dated 13/06/2019 sought for validity extension of Terms of Reference accorded by the Ministry vide letter no. F.No. J-11011/829/2008- IA-II(I) dated 20/06/2016.

Details submitted by the project proponent

9.31.2 ToR for expansion of Integrated Steel Plant capacity from 5.6 MTPA to 12.8 MTPA was granted by the MoEF&CC, vide letter No. J-11011/829/2008-IA II (I), dated. 21st June, 2016 to M/s. Bhushan Steel Limited. Subsequently, the above ToR was revised vide letter No. J-11011/829/2008-IA II (I), dated. 21st June, 2017 to replace Plate Mill with annual

capacity of 1.2 MTPA with Hot Rolling Mill (HRM) with annual capacity of 1.5 MTPA. However, proposed overall capacity of the integrated steel plant remained 12.8 MTPA.

- 9.31.3 Subsequently, M/s. Tata Steel limited has acquired the erstwhile Bhushan Steel Limited on 18/05/2018 under the Corporate Insolvency Resolution Process of Insolvency and Bankruptcy Code 2016. In view of this, Company name has been changed from M/s. Bhushan Steel Limited to M/s. Tata Steel BSL Limited. Application for name transfer of environmental clearance has been submitted to the Ministry vide proposal no. IA/OR/IND/105666/2019.
- 9.31.4 New management of Tata Steel BSL is now reviewing the expansion plan envisaged by former Bhushan Steel with baseline assessment and intend to proceed suitably. M/s. Tata Steel BSL Limited has requested to extend the validity of the ToR till 20/06/2020.

Observations and recommendations of the Committee

- 9.31.5 After detailed deliberations, the Committee recommended to extend the validity period of the ToR till 20/06/2020.

- 9.32** Cement plant (Dlamia DSP Unit), - Clinker (3.0 MTPA), Cement (2.25 MTPA), WHRS (10 MW) and D.G Set (1000 KVA) by **M/s OCL India Ltd** located at Village & Tehsil Rajgangpur, District Sundergarh, **Odisha** [Online Proposal No. IA/OR/IND/59484/2016; File No. J-11011/232/2016-IA-II(I)] - **Corrigendum to Environmental Clearance**

Consideration of the proposal was deferred as the Project Proponent did not attend the meeting. The proposal may be considered subject to satisfactory explanation of the reasons of absence by the applicant.

- 9.33 Expansion of Sponge Iron Plant from 72,000 TPA (2x 100 TPD Kilns) to 1,08,000 TPA (3x100 TPA), MS Billets 82,500 TPA (2x15 TPH Electrical Induction Furnace)- New Rolled Steel Products 82,500 - New Power Generation – WHRB -10 MW (3x10 TPH Boiler) – New, Power Generation –AFBC – 10 MW – 60 TPH Boiler –by **M/s Hothur Ispat Pvt. Ltd.** located at Village Veniveerapura, Taluk & District Bellary, **Karnataka** [Online Proposal No. IA/KA/IND/106002/2019, File No. J-11011/24/2009-IA II (I)]- **Extension** of Environment Clearance.

Consideration of the proposal was deferred as the Project Proponent did not attend the meeting. The proposal may be considered subject to satisfactory explanation of the reasons of absence by the applicant.

ANNEXURE –1

GENERIC TERMS OF REFERENCE (ToR) IN RESPECT OF INDUSTRY SECTOR

1. Executive Summary
2. Introduction
 - i. Details of the EIA Consultant including NABET accreditation
 - ii. Information about the project proponent
 - iii. Importance and benefits of the project
3. Project Description
 - i. Cost of project and time of completion.
 - ii. Products with capacities for the proposed project.
 - iii. If expansion project, details of existing products with capacities and whether adequate land is available for expansion, reference of earlier EC if any.
 - iv. List of raw materials required and their source along with mode of transportation.
 - v. Other chemicals and materials required with quantities and storage capacities
 - vi. Details of Emission, effluents, hazardous waste generation and their management.
 - vii. Requirement of water, power, with source of supply, status of approval, water balance diagram, man-power requirement (regular and contract)
 - viii. The project proponent shall furnish the requisite documents from the competent authority in support of drawl of ground water and surface water and supply of electricity.
 - ix. Process description along with major equipment and machineries, process flow sheet (Quantative) from raw material to products to be provided
 - x. Hazard identification and details of proposed safety systems.
 - xi. Expansion/modernization proposals:
 - a. Copy of all the Environmental Clearance(s) including Amendments thereto obtained for the project from MoEF&CC/SEIAA shall be attached as an Annexure. A certified copy of the latest Monitoring Report of the Regional Office of the Ministry of Environment, Forest and Climate Change as per circular dated 30th May, 2012 on the status of compliance of conditions stipulated in all the existing environmental clearances including Amendments shall be provided. In addition, status of compliance of Consent to Operate for the ongoing /existing operation of the project from SPCB/PCC shall be attached with the EIA-EMP report.
 - b. In case the existing project has not obtained environmental clearance, reasons for not taking EC under the provisions of the EIA Notification 1994 and/or EIA Notification 2006 shall be provided. Copies of Consent to Establish/No Objection Certificate and Consent to Operate (in case of units operating prior to EIA Notification 2006, CTE and CTO of FY 2005-2006) obtained from the SPCB shall be submitted. Further, compliance report to the conditions of consents from the SPCB shall be submitted.
4. Site Details
 - i. Location of the project site covering village, Taluka/Tehsil, District and State, Justification for selecting the site, whether other sites were considered.

- ii. A toposheet of the study area of radius of 10km and site location on 1:50,000/1:25,000 scale on an A3/A2 sheet. (including all eco-sensitive areas and environmentally sensitive places)
- iii. Co-ordinates (lat-long) of all four corners of the site.
- iv. Google map-Earth downloaded of the project site.
- v. Layout maps indicating existing unit as well as proposed unit indicating storage area, plant area, greenbelt area, utilities etc. If located within an Industrial area/Estate/Complex, layout of Industrial Area indicating location of unit within the Industrial area/Estate.
- vi. Photographs of the proposed and existing (if applicable) plant site. If existing, show photographs of plantation/greenbelt, in particular.
- vii. Landuse break-up of total land of the project site (identified and acquired), government/private - agricultural, forest, wasteland, water bodies, settlements, etc shall be included. (not required for industrial area)
- viii. A list of major industries with name and type within study area (10km radius) shall be incorporated. Land use details of the study area
- ix. Geological features and Geo-hydrological status of the study area shall be included.
- x. Details of Drainage of the project upto 5km radius of study area. If the site is within 1 km radius of any major river, peak and lean season river discharge as well as flood occurrence frequency based on peak rainfall data of the past 30 years. Details of Flood Level of the project site and maximum Flood Level of the river shall also be provided. (mega green field projects)
- xi. Status of acquisition of land. If acquisition is not complete, stage of the acquisition process and expected time of complete possession of the land.
- xii. R&R details in respect of land in line with state Government policy

5. **Forest and wildlife related issues (if applicable):**

- i. Permission and approval for the use of forest land (forestry clearance), if any, and recommendations of the State Forest Department. (if applicable).
- ii. Land use map based on High resolution satellite imagery (GPS) of the proposed site delineating the forestland (*in case of projects involving forest land more than 40 ha*).
- iii. Status of Application submitted for obtaining the stage I forestry clearance along with latest status shall be submitted.
- iv. The projects to be located within 10 km of the National Parks, Sanctuaries, Biosphere Reserves, Migratory Corridors of Wild Animals, the project proponent shall submit the map duly authenticated by Chief Wildlife Warden showing these features vis-à-vis the project location and the recommendations or comments of the Chief Wildlife Warden-thereon.
- v. Wildlife Conservation Plan duly authenticated by the Chief Wildlife Warden of the State Government for conservation of Schedule I fauna, if any exists in the study area.
- vi. Copy of application submitted for clearance under the Wildlife (Protection) Act, 1972, to the Standing Committee of the National Board for Wildlife

6. Environmental Status

- i. Determination of atmospheric inversion level at the project site and site-specific micro-meteorological data using temperature, relative humidity, hourly wind speed and direction and rainfall.
- ii. AAQ data (except monsoon) at 8 locations for PM₁₀, PM_{2.5}, SO₂, NO_x, CO and other parameters relevant to the project shall be collected. The monitoring stations shall be based CPCB guidelines and take into account the pre-dominant wind direction, population zone and sensitive receptors including reserved forests.
- iii. Raw data of all AAQ measurement for 12 weeks of all stations as per frequency given in the NAQQM Notification of Nov. 2009 along with – min., max., average and 98% values for each of the AAQ parameters from data of all AAQ stations should be provided as an annexure to the EIA Report.
- iv. Surface water quality of nearby River (60m upstream and downstream) and other surface drains at eight locations as per CPCB/MoEF&CC guidelines.
- v. Whether the site falls near to polluted stretch of river identified by the CPCB/MoEF&CC.
- vi. Ground water monitoring at minimum at 8 locations shall be included.
- vii. Noise levels monitoring at 8 locations within the study area.
- viii. Soil Characteristic as per CPCB guidelines.
- ix. Traffic study of the area, type of vehicles, frequency of vehicles for transportation of materials, additional traffic due to proposed project, parking arrangement etc.
- x. Detailed description of flora and fauna (terrestrial and aquatic) existing in the study area shall be given with special reference to rare, endemic and endangered species. If Schedule-I fauna are found within the study area, a Wildlife Conservation Plan shall be prepared and furnished.
- xi. Socio-economic status of the study area.

7. Impact Assessment and Environment Management Plan

- i. Assessment of ground level concentration of pollutants from the stack emission based on site-specific meteorological features. In case the project is located on a hilly terrain, the AQIP Modelling shall be done using inputs of the specific terrain characteristics for determining the potential impacts of the project on the AAQ. Cumulative impact of all sources of emissions (including transportation) on the AAQ of the area shall be well assessed. Details of the model used and the input data used for modelling shall also be provided. The air quality contours shall be plotted on a location map showing the location of project site, habitation nearby, sensitive receptors, if any.
- ii. Water Quality modelling – in case, if the effluent is proposed to be discharged in to the local drain, then Water Quality Modelling study should be conducted for the drain water taking into consideration the upstream and downstream quality of water of the drain.
- iii. Impact of the transport of the raw materials and end products on the surrounding environment shall be assessed and provided. In this regard, options for transport

- of raw materials and finished products and wastes (large quantities) by rail or rail-cum road transport or conveyor-cum-rail transport shall be examined.
- iv. A note on treatment of wastewater from different plant operations, extent recycled and reused for different purposes shall be included. Complete scheme of effluent treatment. Characteristics of untreated and treated effluent to meet the prescribed standards of discharge under E(P) Rules.
 - v. Details of stack emission and action plan for control of emissions to meet standards.
 - vi. Measures for fugitive emission control
 - vii. Details of hazardous waste generation and their storage, utilization and disposal. Copies of MOU regarding utilization of solid and hazardous waste shall also be included. EMP shall include the concept of waste-minimization, recycle/reuse/recover techniques, Energy conservation, and natural resource conservation.
 - viii. Proper utilization of fly ash shall be ensured as per Fly Ash Notification, 2009. A detailed plan of action shall be provided.
 - ix. Action plan for the green belt development plan in 33 % area i.e. land with not less than 1,500 trees per ha. Giving details of species, width of plantation, planning schedule etc. shall be included. The green belt shall be around the project boundary and a scheme for greening of the roads used for the project shall also be incorporated.
 - x. Action plan for rainwater harvesting measures at plant site shall be submitted to harvest rainwater from the roof tops and storm water drains to recharge the ground water and also to use for the various activities at the project site to conserve fresh water and reduce the water requirement from other sources.
 - xi. Total capital cost and recurring cost/annum for environmental pollution control measures shall be included.
 - xii. Action plan for post-project environmental monitoring shall be submitted.
 - xiii. Onsite and Offsite Disaster (natural and Man-made) Preparedness and Emergency Management Plan including Risk Assessment and damage control. Disaster management plan should be linked with District Disaster Management Plan.

8. Occupational health

- i. Details of existing Occupational & Safety Hazards. What are the exposure levels of above mentioned hazards and whether they are within Permissible Exposure level (PEL). If these are not within PEL, what measures the company has adopted to keep them within PEL so that health of the workers can be preserved,
- ii. Details of exposure specific health status evaluation of worker. If the workers' health is being evaluated by pre-designed format, chest x rays, Audiometry, Spirometry, Vision testing (Far & Near vision, colour vision and any other ocular defect) ECG, during pre-placement and periodical examinations give the details of the same. Details regarding last month analysed data of abovementioned parameters as per age, sex, duration of exposure and department wise.
- iii. Annual report of health status of workers with special reference to Occupational Health and Safety.

- iv. Plan and fund allocation to ensure the occupational health & safety of all contract and casual workers.
9. Corporate Environment Policy
- i. Does the company have a well laid down Environment Policy approved by its Board of Directors? If so, it may be detailed in the EIA report.
 - ii. Does the Environment Policy prescribe for standard operating process / procedures to bring into focus any infringement / deviation / violation of the environmental or forest norms / conditions? If so, it may be detailed in the EIA.
 - iii. What is the hierarchical system or Administrative order of the company to deal with the environmental issues and for ensuring compliance with the environmental clearance conditions? Details of this system may be given.
 - iv. Does the company have system of reporting of non-compliances / violations of environmental norms to the Board of Directors of the company and / or shareholders or stakeholders at large? This reporting mechanism shall be detailed in the EIA report
10. Details regarding infrastructure facilities such as sanitation, fuel, restroom etc. to be provided to the labour force during construction as well as to the casual workers including truck drivers during operation phase.
11. Corporate Environment Responsibility (CER)
- i. To address the Public Hearing issues, an amount as specified under Ministry's Office Memorandum vide F.No. 22-65/2017-IA.III dated 1st May 2018 amounting to Rs.crores, shall be earmarked by the project proponent, towards Corporate Environment Responsibility (CER). Distinct CER projects shall be carved out based on the local public hearing issues. Project estimate shall be prepared based on PWD schedule of rates for each distinct Item and schedule for time bound action plan shall be prepared. These CER projects as indicated by the project proponent shall be implemented along with the main project. Implementation of such program shall be ensured by constituting a Committee comprising of the project proponent, representatives of village Panchayat & District Administration. Action taken report in this regard shall be submitted to the Ministry's Regional Office. No free distribution/donations and or free camps shall be included in the above CER budget
12. Any litigation pending against the project and/or any direction/order passed by any Court of Law against the project, if so, details thereof shall also be included. Has the unit received any notice under the Section 5 of Environment (Protection) Act, 1986 or relevant Sections of Air and Water Acts? If so, details thereof and compliance/ATR to the notice(s) and present status of the case.
13. A tabular chart with index for point wise compliance of above ToRs.

14. The ToRs prescribed shall be valid for a period of three years for submission of the EIA-EMP reports along with Public Hearing Proceedings (wherever stipulated).

The following general points shall be noted:

- i. All documents shall be properly indexed, page numbered.
- ii. Period/date of data collection shall be clearly indicated.
- iii. Authenticated English translation of all material in Regional languages shall be provided.
- iv. The letter/application for environmental clearance shall quote the MOEF&CC file No. and also attach a copy of the letter.
- v. The copy of the letter received from the Ministry shall be also attached as an annexure to the final EIA-EMP Report.
- vi. The index of the final EIA-EMP report must indicate the specific chapter and page no. of the EIA-EMP Report
- vii. While preparing the EIA report, the instructions for the proponents and instructions for the consultants issued by MOEF&CC vide O.M. No. J-11013/41/2006-IA.II (I) dated 4th August, 2009, which are available on the website of this Ministry shall also be followed.
- viii. The consultants involved in the preparation of EIA-EMP report after accreditation with Quality Council of India (QCI)/National Accreditation Board of Education and Training (NABET) would need to include a certificate in this regard in the EIA-EMP reports prepared by them and data provided by other organization/Laboratories including their status of approvals etc. Name of the Consultant and the Accreditation details shall be posted on the EIA-EMP Report as well as on the cover of the Hard Copy of the Presentation material for EC presentation.
- ix. ToRs' prescribed by the Expert Appraisal Committee (Industry) shall be considered for preparation of EIA-EMP report for the project in addition to all the relevant information as per the 'Generic Structure of EIA' given in Appendix III and IIIA in the EIA Notification, 2006. Where the documents provided are in a language other than English, an English translation shall be provided. The draft EIA-EMP report shall be submitted to the State Pollution Control Board of the concerned State for conduct of Public Hearing. The SPCB shall conduct the Public Hearing/public consultation, district-wise, as per the provisions of EIA notification, 2006. The Public Hearing shall be chaired by an Officer not below the rank of Additional District Magistrate. The issues raised in the Public Hearing and during the consultation process and the commitments made by the project proponent on the same shall be included separately in EIA-EMP Report in a separate chapter and summarised in a tabular chart with financial budget (capital and revenue) along with time-schedule of implementation for complying with the commitments made. The final EIA report shall be submitted to the Ministry for obtaining environmental clearance.

ANNEXURE-2

ADDITIONAL ToRS FOR INTEGRATED STEEL PLANT

1. Iron ore/coal linkage documents along with the status of environmental clearance of iron ore and coal mines
2. Quantum of production of coal and iron ore from coal & iron ore mines and the projects they cater to. Mode of transportation to the plant and its impact
3. For Large ISPs, a 3-D view i.e. DEM (Digital Elevation Model) for the area in 10 km radius from the proposal site. MRL details of project site and RL of nearby sources of water shall be indicated.
4. Recent land-use map based on satellite imagery. High-resolution satellite image data having 1m-5m spatial resolution like quickbird, Ikonos, IRS P-6 pan sharpened etc. for the 10 Km radius area from proposed site. The same shall be used for land used/land-cover mapping of the area.
5. PM (PM₁₀ and P_{2.5}) present in the ambient air must be analysed for source analysis – natural dust/RSPM generated from plant operations (trace elements) of PM₁₀ to be carried over.
6. All stock piles will have to be on top of a stable liner to avoid leaching of materials to ground water.
7. Plan for the implementation of the recommendations made for the steel plants in the CREP guidelines.
8. Plan for slag utilization
9. Plan for utilization of energy in off gases (coke oven, blast furnace)
10. System of coke quenching adopted with justification.
11. Trace metals Mercury, arsenic and fluoride emissions in the raw material.
12. Trace metals in waste material especially slag.
13. Trace metals in water
14. Details of proposed layout clearly demarcating various units within the plant.
15. Complete process flow diagram describing each unit, its processes and operations, along with material and energy inputs and outputs (material and energy balance).
16. Details on design and manufacturing process for all the units.
17. Details on environmentally sound technologies for recycling of hazardous materials, as per CPCB Guidelines, may be mentioned in case of handling scrap and other recycled materials.
18. Details on requirement of energy and water along with its source and authorization from the concerned department. Location of water intake and outfall points (with coordinates).
19. Details on toxic metal content in the waste material and its composition and end use (particularly of slag).
20. Details on toxic content (TCLP), composition and end use of slag.

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ADDITIONAL ToRS FOR PELLET PLANT

1. Iron ore/coal linkage documents along with the status of environmental clearance of iron ore and coal mines
2. Quantum of production of coal and iron ore from coal & iron ore mines and the projects they cater to. Mode of transportation to the plant and its impact
3. Recent land-use map based on satellite imagery. High-resolution satellite image data having 1m-5m spatial resolution like quickbird, Ikonos, IRS P-6 pan sharpened etc. for the 10 Km radius area from proposed site. The same shall be used for land used/land-cover mapping of the area.
4. PM(PM₁₀ and P_{2.5}) present in the ambient air must be analysed for source analysis – natural dust/RSPM generated from plant operations (trace elements) of PM₁₀ to be carried over.
5. All stock piles will have to be on top of a stable liner to avoid leaching of materials to ground water.
6. Plan for the implementation of the recommendations made for the steel plants in the CREP guidelines.
7. Plan for slag utilization
8. Plan for utilization of energy in off gases (coke oven, blast furnace)
9. System of coke quenching adopted with justification.
10. Trace metals Mercury, arsenic and fluoride emissions in the raw material.
11. Trace metals in waste material especially slag.
12. Trace metals in water

ADDITIONAL ToRs FOR CEMENT INDUSTRY

1. Limestone and coal linkage documents along with the status of environmental clearance of limestone and coal mines
2. Quantum of production of coal and limestone from coal & limestone mines and the projects they cater to;
3. Present land use shall be prepared based on satellite imagery. High-resolution satellite image data having 1m-5m spatial resolution like quickbird, Ikonos, IRS P-6 pan sharpened etc. for the 10 Km radius area from proposed site. The same shall be used for land used/land-cover mapping of the area.
4. If the raw materials used have trace elements, an environment management plan shall also be included.
5. Plan for the implementation of the recommendations made for the cement plants in the CREP guidelines must be prepared.
6. Energy consumption per ton of clinker and cement grinding
7. Provision of waste heat recovery boiler
8. Arrangement for co-processing of hazardous waste in cement plant.
9. Trace metals in waste material especially slag.

ADDITIONAL ToRs FOR PULP AND PAPER INDUSTRY

1. A note on pulp washing system capable of handling wood pulp shall be included.
2. Manufacturing process details for the existing and proposed plant shall be included. Chapter on Pulping & Bleaching shall include: no black liquor spillage in the area of pulp mill; no use of elemental chlorine for bleaching in mill; installation of hypo preparation plant; no use of potcher washing and use of counter current or horizontal belt washers. Chapter on Chemical Recovery shall include: no spillage of foam in chemical recovery plant, no discharge of foul condensate generated from MEE directly to ETP; control of suspended particulate matter emissions from the stack of fluidized bed recovery boiler and ESP in lime kiln
3. Studies shall be conducted and a chapter shall be included to show that Soda pulping process can be employed for *Eucalyptus/Casuarina* to produce low kappa (bleachable) grade of pulp.
4. Commitment that only elemental Chlorine-free technology will be used for the manufacture of paper and existing plant without chemical recovery plant will be closed within 2 years of issue of environment clearance.
5. A commitment that no extra chlorine basebleaching chemicals (more than being used now) will be employed and AOx will remain within limits as per CREP for used based mills. Plan for reduction of water consumption.

ADDITIONAL ToRs FOR LEATHER/SKIN/HIDE PROCESSING INDUSTRY

1. Justification for engaging a particular type of process (raw hide/skin into semi finishing or finished leather, semi-finished leather to finished leather, dry finishing operations, chrome/vegetable tanning, *etc.*).
2. Details regarding complete leather/ skin/ hide processing including the usage of sulphides, nitrogen compounds, chromium or other tanning agents, post-tanning chemicals, biocides, *etc.*, along with the material balance shall be provided.
3. In case of chrome tanning, details of the chrome recovery plant, management of shavings/solid waste including safe disposal.
4. Details on reuse of soak liquor / saline stream from membrane system, if applicable, to the extent possible in pickling activity after required treatment. Also, mention the salt recovery measures.

ADDITIONAL ToRs FOR COKE OVEN PLANT

1. Justification for selecting recovery/non-recovery (beehive) type batteries with the proposed unit size.
2. Details of proposed layout clearly demarcating various facilities such as coal storages, coke making, by-product recovery area, *etc* within the plant.
3. Details of coke oven plant (recovery/non-recovery type) including coal handling, coke oven battery operations, coke handling and preparation.
4. Scheme for coal changing, charging emission centre, Coke quenching technology, pushing emission control.
5. Scheme for coke oven effluent treatment plant details including scheme for meeting cyanide standard.

ADDITIONAL ToRs FOR ASBESTOS MILLING AND ASBESTOS BASED PRODUCTS

1. Type of the project – new/expansion/modernization
2. Type of fibres used (Asbestos and others) and preference of selection from techno-environmental angle should be furnished
3. As asbestos is used in several products and as the level of precautions differ from milling to usage in cement products, friction products gasketing, textiles and also differ with the process used, it is necessary to give process description and reasons for the choice for selection of process
4. Technology adopted, flow chart, process description and layout marking areas of potential environmental impacts
5. National standards and codes of practice in the use of asbestos particular to the industry should be furnished
6. In case of newly introduced technology, it should include the consequences of any failure of equipment/ technology and the product on environmental status.
7. In case of expansion project asbestos fibre to be measured at slack emission and work zone area, besides base line air quality.
8. In case of green field project asbestos fibre to be measured at ambient air.

**ADDITIONAL ToRs FOR
METALLURGICAL INDUSTRY (FERROUS AND NON-FERROUS)**

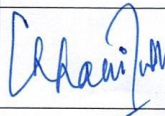
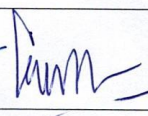
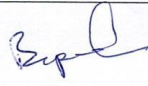
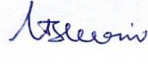
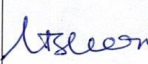
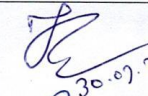
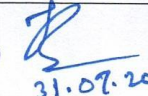
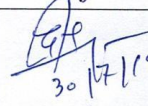
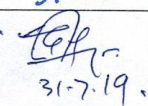
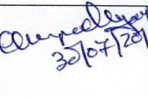
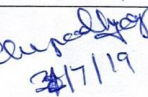
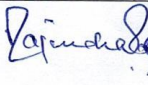
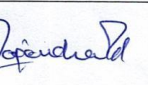
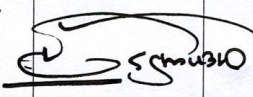
1. Complete process flow diagram describing each unit, its processes and operations, along with material and energy inputs & outputs (material and energy balance).
2. Emission from sulphuric acid plant and sulphur muck management.
3. Details on installation of Continuous Emission Monitoring System with recording with proper calibration system
4. Details on toxic metals including fluoride emissions
5. Details on stack height.
6. Details on ash disposal and management
7. Complete process flow diagram describing process of lead/zinc/copper/ aluminium, *etc.*
8. Details on smelting, thermal refining, melting, slag fuming, and Waelz kiln operation
9. Details on Holding and de-gassing of molten metal from primary and secondary aluminium, materials pre-treatment, and from melting and smelting of secondary aluminium
10. Details on toxic metal content in the waste material and its composition and end use (particularly of slag).
11. Trace metals in waste material especially slag.
12. Plan for trace metal recovery
13. Trace metals in water

Executive Summary



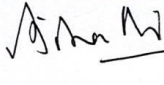
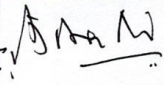

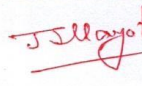
Executive summary of the report in about 8-10 pages incorporating the following:

- i. Project name and location (Village, Dist, State, Industrial Estate (if applicable))
- ii. Products and capacities. If expansion proposal, then existing products with capacities and reference to earlier EC.
- iii. Requirement of land, raw material, water, power, fuel, with source of supply (Quantitative)
- iv. Process description in brief, specifically indicating the gaseous emission, liquid effluent and solid and hazardous wastes. Materials balance shall be presented.
- v. Measures for mitigating the impact on the environment and mode of discharge or disposal.
- vi. Capital cost of the project, estimated time of completion
- vii. Site selected for the project – Nature of land – Agricultural (single/double crop), barren, Govt/private land, status of its acquisition, nearby (in 2-3 km.) water body, population, within 10km other industries, forest, eco-sensitive zones, accessibility, (note – in case of industrial estate this information may not be necessary)
- viii. Baseline environmental data – air quality, surface and ground water quality, soil characteristic, flora and fauna, socio-economic condition of the nearby population
- ix. Identification of hazards in handling, processing and storage of hazardous material and safety system provided to mitigate the risk.
- x. Likely impact of the project on air, water, land, flora-fauna and nearby population
- xi. Emergency preparedness plan in case of natural or in plant emergencies
- xii. Issues raised during public hearing (if applicable) and response given
- xiii. CSR plan with proposed expenditure.
- xiv. Occupational Health Measures
- xv. Post project monitoring plan

**LIST OF PARTICIPANTS IN 9th MEETING OF EAC (INDUSTRY-I) HELD
ON 30 - 31 JULY, 2019**

SL. No.	NAME AND ADDRESS	POSITION	ATTENDANCE SIGNATURE	
			30 th July, 2019	31 st July, 2019
1	Dr. Chhavi Nath Pandey, IFS(Retired) Email: pandeychhavinath55@gmail.com	Chairman		
Members				
2.	, Representative of Central Pulp and Paper Research Institute, Saharanpur.	Member		Absent
3.	, Representative of Indian Meteorological Department, New Delhi.	Member	Absent	Absent
4.	Dr. G. Bhaskar Raju Email: gbraju55@gmail.com	Member		
5.	Dr. Jagdish Kishwan, IFS (Retd.) Email: jkishwan@gmail.com	Member	 30.07.2019	 31.07.2019
6.	Dr. G.V. Subramanyam Email: sv.godavarthi@gmail.com	Member	 30/7/19	 31-7-19.
7.	Shri. Ashok Upadhyaya Email: ahupadhy@rediffmail.com	Member	 30/7/2019	 31/7/19
8.	Shri. R.P. Sharma Email: rpsh2@hotmail.com	Member		
9.	Shri. Sanjay Deshmukh docsvd@yahoo.com Email: sanjaydeshmukh@mu.ac.in	Member		Absent

MoM of 9th meeting of the Re-constituted EAC (Industry-I) held during 30-31st July, 2019

SL. No.	NAME AND ADDRESS	POSITION	ATTENDANCE SIGNATURE	
			26 th	27 th
10.	Prof. S.K. Singh Email: sksinghdee@gmail.com singhsk@email.com	Member	ABSENT	ABSENT
11.	Dr. R. Gopichandran Email: r.gopichandran@vigyanprasar.gov.in	Member		
12.	Shri. Jagannath Rao Avasarala Email: avasaralajagan@gmil.com	Member		
13	Shri. J.S. Kamyotra Email: kamyotra@yahoo.co.in	Member		
14.	Shri. Aravind Kumar Agrawal Director, MoEF&CC Email: dirind-moef@gov.in	Member Secretary	